

Annex 1 Work order signed by ETO with the European Commission

1. Subject: Licensing conditions for mobile communications.

2. Purpose

To identify and analyse the rights and obligations of Mobile operators, and to propose harmonised conditions - which maintain a balance between rights and obligations - to be attached to authorisations of Mobile operators in CEPT/ECTRA countries, in view of the liberalisation of telecommunications sectors in the European Union.

3. Justification

Council resolution of 29 June 1995 on the further development of mobile and personal communications in the European Union supporting the drawing up of a regulatory framework which should foster the development of the mobile and personal communications sector in conformity with the overall reform of the telecommunications sector.

Communication of the European Commission of 23 November 1994 to the European Parliament and to the Council on the consultation on the Green Paper on Mobile and Personal Communications recognising the need for a new approach to national licensing procedures and conditions.

Proposal of 14 November 1995 (COM (95) 545 final), for a “European Parliament and Council Directive on a common framework for general authorisations and individual licences in the field of telecommunications services” which goes beyond the objectives of ensuring full Union-wide competition and harmonising national legislation, but also reflects the role of authorisation regimes in imposing rights and obligations and in monitoring the market.

Annex 1 of the above-mentioned proposal for a directive (COM (95) 545 final) listing the only conditions which may be attached to authorisations.

4. Work requirement

- (1) to identify different services and networks within the mobile communication sector that have to be distinguished with regard to authorisations.
- (2) to identify the conditions attached to authorisations of mobile networks -including private and public networks, to compare these conditions with those of fixed networks.
- (3) to describe and analyse those conditions which are specific to mobile communications and their consequences on the licensing of mobile networks or services.
- (4) to compare the above task three with the conditions applicable to fixed networks and services, and to give a brief presentation of the common conditions of both fixed and mobile networks as proposed in relevant licensing work orders.
- (5) to coordinate the results with ERC/ERO which are in charge of frequency issues.

- (6) to propose harmonised conditions specific to mobile networks and services to be included in their future licensing conditions.

5. Execution

The final report on this work requirement will be made available to the Commission on 1 September 1997.

6. Deliverables

Three interim reports and one final report shall be delivered.

The first interim report shall be delivered during the course of the work, containing a description and analysis of specific conditions for mobile networks (1st December 1996).

The second interim report shall contain a presentation of specific harmonised conditions to be implemented in mobile licensing regimes (1st March 1997).

The third interim report shall contain the draft findings and proposals as they will be submitted to CEPT/ECTRA for approval (1st June 1997).

The final report shall contain the findings and proposals, as approved by CEPT/ECTRA and will include any comments individual CEPT/ECTRA members may have on the implementation of these proposals with regard to their respective national regimes.

All reports shall be made available in draft form one month before a liaison meeting at which the results will be discussed and approval may be given for their release.

The Commission shall receive three copies of the interim reports, and the approved final report shall be made available in 15 bound copies, one unbound copy and one copy on floppy disk in Word for Windows V2.0 format. Graphics shall be made available on separate hard copies.

7. Manpower

It is expected that this task can be accomplished in 12 man-months of effort at expert level, including subcontracting.

8. Subcontracting

Subcontracts may be given to external experts for the execution of parts of this contract, representing 3 man-months.

Annex 2: Comparison of fixed and mobile voice on the basis of the Voice Telephony Directive

0 Introduction

Section 1 gives an overview of some relevant definitions provided by different European directives.

Section 2 contains a table analysing the entities to which each of the different obligations found in the draft voice telephony apply.

1 Definitions

Some terms are very close to each other. It needs some concentration for example to distinguish between “voice telephony”, “fixed public telephone service”, and “publicly available telephone service”. In order to fully understand the VT directive, and the table in section 2, a clear understanding of the following terms is important :

- telecommunications network as opposed to telecommunications service (1.1)
- public telecommunications network¹, fixed public telephone network and public mobile telephone network (1.2)
- publicly available telephone service, fixed public telephone service, voice telephony and public mobile telephone service (1.3)
- services which may be funded in the context of universal service (1.4).

1.1 Telecommunications network² – telecommunications service³

Telecommunications network	Telecommunications service
<i>means transmission systems and, where applicable, switching equipment and other resources which permit the conveyance of signals between defined termination points by wire, by radio, by optical or by other electromagnetic means.</i>	<i>means services whose provision consists wholly or partly in the transmission and routing of signals on telecommunications networks, with the exception of radio and television broadcasting</i>

¹ As a term to cover both the public fixed and the public mobile networks, preference has been given to “public telecommunications network” above “public telephone network” which could seem to be more appropriate. “Public telecommunications network” is a broader notion and covers in fact also e.g. public data networks. “Public telephone network” appears only in article 11 of the new VT Directive and has not been defined although one could assume that this notion includes strictly mobile and fixed public telephony networks by analogy with the term “publicly available telephone network” found in Annex I of the Interconnection Directive. But as set out before, preference has been given to the defined and more consequently used term “public telecommunications network”.

² Article 2 (c) of Directive 97/33/EC of 30 June 1997 on interconnections

³ Article 2 (d) of Directive 97/33/EC of 30 June 1997 on interconnections

1.2 Public telecommunications network⁴ - fixed public telephone network⁵-public mobile telephony network⁶

Public telecommunications network <i>means a telecommunications network used, in whole or in part, for the provision of publicly available telecommunications services</i>	
Fixed public telephone network <i>means the public switched telecommunications network which supports the transfer between network termination points at fixed locations of speech and 3,1 kHz bandwidth audio information, to support inter alia:</i> <ul style="list-style-type: none"> 2) – voice telephony; 2) – facsimile Group III communications, in accordance with ITU-T Recommendations in the "“T-series”"; 2) – voice band data transmission via modems at a rate of at least 2 400 bit/s, in accordance with ITU-T Recommendations in the "“V-series”". <i>Access to the end-user's network termination point is via a number or numbers in the national numbering plan.</i>	Public mobile telephone network <i>is a public telephone network where the network termination points are not at fixed locations.</i>

1.3 Publicly available telephone service⁷ – fixed public telephone service⁸ – voice telephony service⁹ – public mobile telephone service¹⁰

Publicly available telephone service <i>includes both fixed public telephone services and public mobile telephone services</i>	
fixed public telephone service <i>The fixed public telephone service means the provision to end-users at fixed locations of a service for the originating and receiving of national and international calls, and may include –in addition to voice telephony-</i> <ul style="list-style-type: none"> • access to emergency (112) services, • the provision of operator assistance, • directory services, 	public mobile telephone service <i>is a telephony service whose provision consists, wholly or partly, in the establishment of radiocommunications to one mobile user, and makes use wholly or partly of a public mobile telephone network.</i>

⁴ article 2, 1, (b) of Directive 97/33/EC of 30 June 1997 on interconnections

⁵ Article 2, 3, (a) of the Common position adopted by the Council of 9 June 1997 with a view to adopting Council Directive 97/ /EC on the application of open network provision (ONP) to voice telephony and universal service for telecommunications in a competitive environment refers to the description in Annex I of Directive 97/33/EC of 30 June 1997 on interconnections

⁶ idem previous footnote

⁷ article 2, 3 (b) of the Common position adopted on 9 June 1997 concerning the ONP voice telephony directive

⁸ Annex I of Directive 97/33/EC of 30 June 1997 on interconnections

⁹ article 2, 2 (e) of the Common position adopted on 9 June 1997 concerning the ONP voice telephony directive

¹⁰ Annex I of Directive 97/33/EC of 30 June 1997 on interconnections

Publicly available telephone service <i>includes both fixed public telephone services and public mobile telephone services</i>	
fixed public telephone service	public mobile telephone service
<ul style="list-style-type: none"> • <i>provision of public pay phones,</i> • <i>provision of service under special terms</i> • <i>and/or provision of special facilities for customers with disabilities or with special social needs.</i> <p><i>Access to the end-user is via a number or numbers in the national numbering plan</i></p>	
<p>voice telephony¹¹ <i>a service available to the public for the commercial provision of direct transport of real-time speech via the public switched network or networks such that any user can use equipment connected to a network termination point at a fixed location to communicate with another user of equipment connected to another termination point</i></p>	

1.4 Services which may be funded in the context of universal service¹²

- the provision of connection to the fixed public telephone network at a fixed location and access to fixed public telephone services which
 - allows users to make and receive national and international calls
 - supports speech, facsimile and/or data communications
- directory services
- public pay telephones
- specific measures for disabled users and users with special social needs

¹¹ Art. 2, 3, (b) of the Common position adopted on 9 June 1997 concerning the ONP voice telephony directive states : *Fixed public telephone services, as indicated in Annex I part I of Directive 97/./EC on Interconnection, may include – in addition to voice telephony service – access to emergency <112> services, the provision of operator assistance, directory services, provision of public pay phones, provision of service under special terms and/or provision of special facilities for customers with disabilities or with special social needs, as set out in this Directive, but does not include value added services provided over the public telephone network.*

Annex I, part I of Directive 97/33/EC on Interconnection has the following definition :
The fixed public telephone service means the provision to end-users at fixed locations of a service for the originating and receiving of national and international calls, and may include access to emergency (112) services, the provision of operator assistance, directory services, provision of public pay phones, provision of service under special terms and/or provision of special facilities for customers with disabilities or with special social needs.
Access to the end-user is via a number or numbers in the national numbering plan.

¹² Chapter II of the Common position adopted on 9 June 1997 concerning the ONP voice telephony directive concerning 'Provision of a defined set of services which may be funded in the context of universal service'.

2. Analysis of the entities subject to the VT directive

The Directive 95/62/EC did not apply to mobile telephony services. In the revision it was however thought appropriate that *“in view of the growing demand for mobile telephony services (...) certain provisions of this Directive should apply to mobile telephony services”*.¹³

In principle, the new Directive still does not apply to public mobile telephone networks and services¹⁴. Exceptions are the articles 6 (directory services), 9 b and c (connection of terminal equipment and use of the network), 10 (contracts) and 11 a (publication of and access to information). However, it is stated that Member States are not prevented, *in conformity with Community law, from extending the application of provisions of the Directive to mobile networks and/or services even if they are not explicitly mentioned in its scope*.

This section contains a table analysing the entities to which each of the different obligations found in the draft voice telephony directive applies.

Distinction is made between the fixed and the mobile telephony services and networks. The entities operating fixed telephony networks or services have been divided into 4 categories: operators with universal service obligations (USO), operators with significant market power (SMP), operators enjoying special or exclusive rights (ER) and operators other than the three preceding categories.

Where a provision was found to be applicable to all providers of fixed public telephone, all four of the categories are marked with a cross.

Concerning entities having universal service obligation, it should be specified that sometimes ‘if also SMP’ is typed in. This means that this provision is only applicable if the entity also has significant market power.

In article 12, the crosses for US and SMP are in bold. This has been done to reflect the fact that article 12 aims at setting the quality of service parameters for all sorts of organizations but stresses that this can “in particular” be done for organizations which have SMP or have been designated to provide US.

A last remark is needed on article 14 (itemized billing, tone dialling, selective call barring). Since the directive foresees that *“one or more operators may be designated to provide these facilities”*, it would be incorrect to tick one or all of the categories.

¹³ whereas 3 of the Common position adopted on 9 June 1997 concerning the ONP voice telephony directive

¹⁴ Article 1, 2 of the Common position adopted on 9 June 1997 concerning the ONP voice telephony directive

Art	Description of the provision in terms of obligation for the operator or service provider	fixed				mobile
		USO	SMP	other	spec rights	
3	availability • available to all users in the territory, independent of geographical location,	X				
	affordability • available at an affordable price in particular for users in rural or high cost areas and for vulnerable groups of users such as the elderly, those with disabilities or those with special social needs.	X				
4	universal service funding Where the services set out in this Chapter cannot be commercially provided on the basis of conditions laid down by the Member State, Member States may set up universal service funding schemes for the shared financing of those services	X				
5	provision of network connection and access to the telephone service • all reasonable requests for connection to the fixed public telephone network at a fixed location and access to fixed public telephone services must be met by at least one operator and Member States may, if necessary to this end, designate one or more operators so that the whole of their territory is covered.	X				
	• The connection provided shall be capable of allowing users to make and receive national and international calls, supporting speech, facsimile and/or data communications.	X				
6	Directory services • the right for subscribers to have an entry in publicly available directories and to verify and, if necessary, correct or request removal of that entry;	X	X	X	X	X
	• availability of directories of all subscribers who have not expressed opposition to being listed, including fixed, mobile and personal numbers, to users in a form approved by the national regulatory authority, whether printed or electronic, or both, and are updated on a regular basis;	X	X	X	X	X
	• availability to all users, including users of public pay telephones, of at least one telephone directory enquiry service covering all listed subscribers' numbers	X	X	X	X	X
	• all organizations which assign telephone numbers to subscribers have to meet all reasonable requests to make available the relevant information in an agreed format on terms which are fair, cost oriented and non-discriminatory.	X	X	X	X	X
8	specific measures					

Art	Description of the provision in terms of obligation for the operator or service provider	fixed				mobile
		USO	SMP	other	spec rights	
	<ul style="list-style-type: none"> where appropriate, specific measures can be taken to ensure access to and affordability of fixed public telephone services for disabled users and users with special social needs. 	X				
9	connection of terminal equipment and use of the network All users should be able to: <ul style="list-style-type: none"> connect and use terminal equipment suitable for the connection provided, in accordance with national and Community law; 	X	X	X	X	
	<ul style="list-style-type: none"> access operator assistance services and directory enquiry services in accordance with Article 6.2(c), unless the subscriber decides otherwise; 	X	X	X	X	X
	<ul style="list-style-type: none"> access Emergency Services at no charge, using the dialling code <112> and any other dialling codes specified by national regulatory authorities for use at a national level. 	X	X	X	X	X
10	contracts <ul style="list-style-type: none"> obligation to provide a contract which specifies the service to be provided or refers to publicly available terms and conditions. The contract or the publicly available terms and conditions shall at least specify the supply time for initial connection and the types of maintenance service offered, the compensation and/or refund arrangements for subscribers which apply if the contracted service is not met and a summary of the method of initiating procedures for the settlement of disputes. 	X	X	X	X	X
	<ul style="list-style-type: none"> provide NRAs or other competent bodies on their request with the alteration of the conditions of contracts and the conditions of any compensation and/or refund schemes used. 	X	X	X	X	X
11	publication and access to information <ul style="list-style-type: none"> obligation to publish adequate and up-to-date information for consumers on the standard terms and conditions with regard to access to and use of the public telephone networks and/or publicly available telephone services, in particular tariffs for end-users, any minimum contractual period, if relevant, and conditions of renewal of the contracts 	X	X	X	X	X
	<ul style="list-style-type: none"> obligation to provide the NRAs with details of technical interface specifications for network access 	X	X	X	X	
	<ul style="list-style-type: none"> obligation to communicate changes in existing interface specifications or information on new interfaces in advance to the NRA obligation to publish information on access to and use of the network and service. 	X	X	X	X	
12	quality of service parameters					

Art	Description of the provision in terms of obligation for the operator or service provider	fixed				mobile
		USO	SMP	other	spec rights	
	<ul style="list-style-type: none"> if deemed necessary by NRA, meet performance targets set in individual licences and publish data obligation to perform according to certain predefined parameters (annex III) provide information concerning the performance on parameters of annex III to NRA on request right for NRAs to call for an independent audit of performance data 	X	X	X	X	
		X	X	after 18 m	X	
		X	X			
13	conditions of access and use and essential requirements <ul style="list-style-type: none"> foresee and publish procedures and measures for events such as the interruption, termination, significant variation or reduction in availability of services in case of refusal of access on the basis of essential requirements, the relevant national provisions should be clear, published and imposed through regulatory means ensure security of network operations ensure network integrity take all necessary steps to ensure the effective use of the frequency spectrum and the avoidance of harmful interference imposing conditions on the users on the basis of special and exclusive rights has to be done through regulatory means under the authority of the NRA 	X if also SMP	X			
		X	X	X	X	
		X	X	X	X	
		X	X	X	X	
					X	
14	itemized billing, tone dialling, selective call barring <ul style="list-style-type: none"> provide tone dialling provide basic level of itemized billing with no extra charge provide selective call barring facilities and itemized billing on request no identification of calls which are free of charge 	one or more operators can be designated to provide these facilities to most users before 31.12.98 and ensure general availability before 31.12.2002				
		X	X	X	X	
15	provision of additional facilities <ul style="list-style-type: none"> provision of calling-line identification provision of direct dialling-in provision of call forwarding 	if SMP				
		X	X			
		X	X			
		X	X			
16	special network access					

Art	Description of the provision in terms of obligation for the operator or service provider	fixed				mobile
		USO	SMP	other	spec rights	
	<ul style="list-style-type: none"> deal with reasonable requests from service-providers for special network access provide special network access facilities and information in a non-discriminatory way make available details of agreements to NRA on request 		X X X			
17	Tariff principles Unless it is judged that in a specific geographical area there is effective competition <ul style="list-style-type: none"> tariffs have to be cost oriented tariffs should in general be independent of the type of application which the user implements tariffs for additional facilities have to be sufficiently unbundled a public notice period has to be observed before tariff changes are implemented 	if also SMP X X X X	X X X X			
18	Cost accounting principles <ul style="list-style-type: none"> implementation of a cost accounting system suitable for cost oriented tariffs make available to the NRA the main categories of costs and rules used for allocation of costs on request as well as detailed accounting information follow specific rules laid down in VT directive on what the accounting system should include ----- submission of financial accounts to audit and publication of them	if also SMP X X X	X X X		X X	
19	discounts and other special tariff provisions <ul style="list-style-type: none"> discount schemes have to be fully transparent, published and applied in a non-discriminatory way modification or withdrawal can be required by NRA 	if also SMP X X	X X			
20	specifications for network access suitable standards for access to be published in ONP list of standards	X	X	X	X	
21	non-payment of bills <ul style="list-style-type: none"> measures to cover non-payment of bills need to be published, proportionate and non-discriminatory service interruption confined to the service concerned, except in cases of fraud, persistent late payment or non-payment possible obligation to disconnect completely only after a period during which calls which do not incur 	X X X	X X X	X X X	X X X	

Art	Description of the provision in terms of obligation for the operator or service provider	fixed				mobile
		USO	SMP	other	spec rights	
	a charge to the subscriber are permitted					
22	conditions for the termination of offerings <ul style="list-style-type: none"> • termination of or change in offerings only after consultation with affected users and timely notice • consumer protection organisations can bring before the NRA disputes concerning the termination date 				X X	
23	variation of published conditions <ul style="list-style-type: none"> • obligation to seek agreement of NRA when it is judged unreasonable to apply the published tariffs and supply conditions 				X	
26	conciliation and resolution of national disputes <ul style="list-style-type: none"> • availability of easily accessible and inexpensive procedures to solve disputes, in particular concerning telephone bills or terms and conditions under which the telephone service is provided • when organisations in more than one Member States are involved, possibility to refer to conciliation procedure initiated by ONP chairman 	only for the provisions applicable to each				
		X X	X X	X X	X X	X X

Annex 3. Overview of public mobile licences

	GSM			DCS-1800			Paging analogue			ERMES		
	operator	licence date	procedure	operator	licence date	procedure	operator	licence date	procedure	operator	licence date	procedure
AU	Max Mobil A1	1996 1993		no system								
BE	Proximus Mobistar		comp bidding	in process			Belgacom		monopoly	in process		
DK	TeleDanmark Sonofon	1991, renewed 97 1991 renewed 97	com bidding	TeleDanmark Sonofon Mobilix Telia	June '97 June '97 June '97 June '97	comp bidding	Tele-Danmark		automatical grant	TeleDanmark Sonofon Telia	94 and 96 97 97	comp bidding
FI	Alands Mobiltelefon Radiolinja Telecom Finland	1991 1991 1991	comp bid	Finnet Telia Finland Radiolinja Sonera	1995 1995 1995 1995	comp bid comp bid comp bid comp bid	Sonera Helsinki Telephone Company		free free	Sonera		free
Fr	France Telecom SFR	03.91 03.91	extention of licence	<i>National:</i> Bouygues <i>Regional</i> France Telecom SFR	12.94 12.94 12.94	comp bidding						
Ger	DeTe Mobil Mannesman	1990 1990	comp bidding	E-plus Viag	1993 1997	comp bidding	DeTe Mobil MiniRuf DFR	1994 1994 1994	comp bid comp bid comp bid	DeTe Mobil MiniRuf InfoCom	1996 1996 1996	Auction Auction Auction
Gr	Telestet Panafon	09.92 09.92	comp bidding	OTE	dec 95	concession	OTE	dec 95	concession	not lib		

	GSM			DCS-1800			Paging analogue			ERMES		
	operator	licence date	procedure	operator	licence date	procedure	operator	licence date	procedure	operator	licence date	procedure
Ir	Eircel Esat Digiphone	1993 1997										
Italy	Omnitel Telecom Italia	1995 1992										
Neth	KPN Libertel	01.04.95 01.04.95	comp bidding	2 licences will be awarded		auctioning	KPN Callmax	94	concession first come first served	KPN Callmax	Aug 96 Aug 96	comp bidding
NW	NetCom Telenor											
Po	Telecel TMN Main Road	Oct 91 March 92 Nov 97	com bid aut grant com bid	Main Road TMN Telecel	Nov 97 April 98 April 98	com bid aut grant aut grant	Portugal Telecom ¹⁵ TLM Finacom ¹⁶ Contactel Telechamada	July 92 May 92 April 92 April 92 April 92	aut grant aut grant comp bid comp bid comp bid			
SP	Airtel Movistar											
SWE	Telia Comviq Europolitan	7.04.94 7.04.94 7.04.94	extention of licence	Telia Comviq Europolitan Tele8	07.03.96 31.01.96 31.01.96 31.01.96	comp bidding	Telia			TeleDanmark Telia	06.12.94 06.12.94	comp bidding

¹⁵ Azores Autonomous Region and Madeira Autonomous Region

¹⁶ in cancelling process

	Mobile Data			Telepoint		
	operator	licence date	procedure	operator	licence date	procedure
BE	RAM Securicor LCL BTC		first come first served			
DK	not available			not available		
Fr						
Ger	DeTeMob RadioCom	1994 1999	comp bidding comp bidding			
Gr						
NLh	RAM		first come, first served	KPN	1992	Automatic grant
SW E						
UK	Cognito RAM Paknet Securicor	jan 91 nov 91 feb 92 aug 96	first come, first served	no longer operational		

Annex 4 General principles concerning licensing of mobile communications

<p>France</p>	<ul style="list-style-type: none"> • Telecommunications activities can be carried out freely, in accordance with the terms of the necessary licences and declarations • Authorisation to provide networks or services may only be refused on the grounds of public order or in the interest of national defence and public safety, or as a result of technical constraints due to the limited availability of frequencies, or when the applicant does not have the technical and financial capacity or has been subject to certain penalties. • The number of licences may only be limited owing to technical conditions due to the scarcity of frequencies. Concerning public mobile communications, the number of participants on the market has been limited on the basis of scarcity of frequencies for all technologies. • All cases of frequency allocation shall provide for conditions of effective competition which means that the rights and obligations of all actors on the market have to be considered when issuing new licences. • Evolving over the years, two awarding procedures have been used: extension of existing licences and comparative bidding. • The legal basis for the different individual licences has been the general Telecommunications Act and a tender document, specific per technology.
<p>Ger</p>	<ul style="list-style-type: none"> • The number of licences to be granted for entry to the market are, as a rule, not limited. An exception to this principle is the availability of scarce resources (e.g. frequencies) Concerning public mobile communications, the number of participants on the market has been limited on the basis of scarcity of frequencies for all technologies. For trunking systems, limitation was introduced only in 14 predefined regions where congestion occurred. In other parts of the country, large numbers of licences were given on the basis of an administrative procedure. Apart from scarcity of frequencies, the competition aspect is also relevant for the decision on the number of licences. It was in that context that in 1996 it was decided to organise a procedure to select a second GSM-1800 operator, four years after the first licence was given. • Evolving over the years, four awarding procedures were used: automatic grant, administrative procedure, comparative bidding and auctioning. For GSM and mobile data, DeTe Mobil had already developed a network and commercial activity before those markets were opened for competition. The ‘born operator’ was granted a licence at the same time as the newly chosen competing operators without participating in the comparative bidding. The new Telecommunications Act of July 1996 states that if the number of licences to be granted is restricted, licensing may be effected by means of competitive bidding or auction. The first option is always auctioning. Under specific conditions, competitive bidding is considered. Under the new Act, licences were auctioned for ERMES. However, the second GSM-1800 licence was granted on the basis of comparative bidding. It was considered that this was the most equitable way of introducing more competition into a market where competitive bidding had been used before. <p>The legal basis for the different individual licences was the general</p>

	<p>Telecommunications Act and a tender document, specific per technology. The new Act does not substantially differ from the previous one. The main difference is that it is now believed that mobile operators have gathered broad technical experience in network management which makes it no longer indispensable to impose very detailed technical obligations</p>
NI	<ul style="list-style-type: none"> • In the Netherlands the number of market parties is in principle not restricted a priori, except where this is justified by a lack of resources, in particular frequencies. This principle has been followed in a consequent way. For mobile data and analogue paging, the number of licences has not been limited and they have been granted upon request by a candidate, using an administrative procedure. • Evolving over the years, three awarding procedures were used: automatic grant, first come first served and comparative bidding. Auctioning of DCS-1800 frequencies will be organised mid February 1998. The historical operator, KPN, was operating GSM, analogue paging and telepoint under its concession before the mobile sector was liberalised. The right to operate those services can therefore be considered to be automatically granted. The procedure common in case of limited spectrum availability is competitive bidding. This was used to attribute the second GSM licence and the ERMES licences. In the latter case, the selection did not take place because there were only two candidates for three licences. In the future, auctioning will be the preferred procedure as it guarantees more transparency. Furthermore, licences for cellular mobile communications (GSM and DCS-1800) will be awarded according to different procedures. • The requirements are limited to a minimum. They relate mainly to making sure that the candidate has the financial, commercial and technical means and knowledge to operate the network and service. • The legal basis for the different individual licences was the general Telecommunications Act and a tender document, specific per technology.
SW	<ul style="list-style-type: none"> • According to the Telecommunications Act of 1 July 1997, the provision of telecommunications activities is free except for three categories of services within a public telecommunications network for which notification is required. These categories are telephony services, mobile communications, services requiring numbers and leased lines. If these activities are of an extent which is considerable with regard to the area covered, the number of users or other comparable circumstances, a licence is required. • In addition to the Telecommunications Act of 1997, the Radio Communications Act of 1993 applies to telecommunications activities involving the use of radio transmitters. The Act specifies requirements on licences for the possession and use of radio transmitters. • When it is a matter of granting licences to provide new or substantially revised mobile telecommunications services or extension of the frequency spectrum allotted to mobile communications, applications are dealt with through a procedure of general invitation to apply. • Evolving over the years, two awarding procedures were used for public mobile communications systems: extension of an existing licence and comparative bidding. • The legal basis for the different individual licences was the general Telecommunications Act, the Radio Communications Act and an invitation to bid, specific per technology.
UK	<ul style="list-style-type: none"> • According to the Telecommunications Act 1984, no telecommunications system may be run without a licence from DTI

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| | <ul style="list-style-type: none">• A telecommunications system which uses radio, also requires a licence under the Wireless Telegraphy Act 1949.• Licence applications will normally be considered on their individual merits, but in cases involving radio spectrum, which is a scarce resource, there may be a competition or other such procedure involved in the issue of the licence• Evolving over the years, two awarding procedures were used for public mobile communications systems: automatic grant and comparative bidding. Auctioning is considered for the third generation mobile communications systems.• The legal basis for the different individual licences was the general Telecommunications Act, the Wireless Telegraphy Act 1949 and an invitation to bid, specific per technology. |
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Annex 5: Scope of the licence for mobile communications

Fr	<p>The existing licences for mobile communications in France cover</p> <ul style="list-style-type: none"> • the setting up and operation of the network (base stations, mobile switching centres and other installations) • the provision of service based on a certain standard. • the right to use a range of frequencies. However, the assignment of frequencies needs to be carried out in a flexible way. There is therefore an administrative document, issued by ART, which supplements the Ministerial licence and includes technical details and the channels taken into service.
FI	<p>License for mobile network covers the setting up of the network. It specifies the geographical area where the network may be built. Operation of the network does not need a license; only a notification is needed.</p>
Ger	<p>The existing licences for mobile communications in Germany cover</p> <ul style="list-style-type: none"> • the setting up and operation of the network (base stations, mobile switching centres and other installations) • the carrying of traffic for the provision of services based on a certain standard. • Frequencies are assigned by separate administrative act and the licences are supplemented by these administrative acts. <p>Section 11 of Appendix 2 with reference to Administrative Order 116/1996 states that upon application, licencees will be assigned the frequencies they require to operate, under the licence, provided these are shown in the frequency usage plan for the intended use, are available and are compatible with other frequency usages §§ 47-49 of the Telecommunications Act.</p> <p>In the existing D1 and D2 licences, the frequencies were assigned in the licence. The new legislation gives more flexibility. The licence grants access to a certain frequency range while an administrative supplement to the licence provides technical details as to when channels are used</p> <ul style="list-style-type: none"> • Terminal equipment for the public mobile systems included in the study is covered by a general authorisation.
NL	<ul style="list-style-type: none"> • An individual licence for mobile communications is composed of two Ministerial Decrees. Both documents are delivered by the Minister on the same date and are both part of the same licence. The dispositions cannot be seen as separate “service licences” and “network licences”. • The first Decree gives the right to install and run the network. It includes also specific conditions concerning the quality of the service, the coverage and the sort of services offered. • The second Decree attributes the frequency channels which can be used and specifies the technical characteristics of the base stations in order to guarantee the efficient use of frequencies and avoidance of harmful interferences. Although the frequency allocation is subject to a separate ministerial disposition, it is an integral part of the licensing awarding procedure
UK	<ul style="list-style-type: none"> • In the UK, mobile communications require two separate licences: a radio licence based on the Wireless Telegraphy Act 1949 and a second licence based on the Telecommunications Act. Both licences are issued at the same moment by DTI, which has a coordinating role. • The “radio licence” governs detailed technical frequency aspects like the outgoing power of the base stations, the allocated channels and the location of the base stations. The granting of this licence involves the Radio Agency • The second licence involves OFTEL. This licence obliges the operator to set up and operate a network as well as to provide service based on a certain standard. • Terminal equipment for the public mobile systems is exempted from licence under Wireless Telegraphy Act. Terminals are covered by the class licence on Self Provision

Annex 6 Licensing regimes of different services and networks in national regulations

<p>Finland</p>	<p>Section 5 of the Telecommunications Market Act of 1997 stipulates that a telecommunications operator shall, prior to commencing public telecommunications, submit a notification on telecommunications in accordance with section 6 unless provided otherwise in paragraphs 2-4.</p> <p>The provision of telecommunications network services in the public mobile network shall be subject to a licence in accordance with section 7.</p> <p>Telecommunications solely for the purpose of broadcasting or distribution of programmes to public shall not require a notification or licence pursuant to this Act.</p> <p>The Ministry shall discharge telecommunications from the liability to notify in accordance with paragraph 1 if the maintenance of the notification procedure of such telecommunications no longer is necessary for the attainment of the purposes of this Act referred to in section 1.</p> <p>Radio equipment forming part of the telecommunications network shall further be governed by provisions issued separately thereon (Section 3 of the Telecommunications Market Act of 1997)</p> <p>Section 7 of the Telecommunications Market Act of 1997 foresees that the licence shall be granted by the Ministry. The licence application shall contain the information prescribed by the Ministry. Prior to granting a licence, the Ministry shall make a public notification of the possibility to apply for licences.</p> <p>A licence shall be granted if it is evident that:</p> <ol style="list-style-type: none"> 2) the applicant has sufficient financial resources to attend to the duties of a telecommunications network operator; 2) the applicant complies with the provisions and regulations on telecommunications; as well as that 3) radio frequencies are available for the operation of the telecommunications referred to in the application. <p>If licences can be granted to some of the applicants only due to the scarcity of radio frequencies, they shall be granted to those applicants whose operations best promote the attainment of the purposes of this Act referred to in section 1.</p> <p>A licence shall be granted for a set period of 20 years at the most. The licence shall determine the operational area of the telecommunications operator. Conditions in accordance with the essential requirements may be attached to the licence</p> <p>Comparison of licensing of fixed and mobile sectors in Finland</p> <p>Only the provision of telecommunications network services in public mobile network is subject to a licence in Finland. All other telecommunications is free from licensing.</p>
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<p>France</p>	<p>The existing licences for mobile communications in France cover</p> <ul style="list-style-type: none"> • the setting up and operation of the network (base stations, mobile switching centres and other installations) • the provision of service based on a certain standard. <p>The Telecommunications Act distinguishes between network infrastructure, services and terminal equipment but does not mention mobile communications as a separate licensing category.</p> <p>Terminal equipment for the public mobile systems are covered by a general authorisation.</p> <p>The licences for mobile communications are combined network and service licences.</p> <p>According to the Telecommunications Act of 1996 the following licensing regimes apply:</p> <p>for networks</p> <ul style="list-style-type: none"> • Article L 33-1 :Authorisation by the Telecommunications Minister for the establishment and operation of public networks • Article L 33-2 Authorisation by the telecommunications regulatory authority for the establishment of independent networks • Article L 33-3 general authorisation for certain installations <ul style="list-style-type: none"> • private networks • pay phones not installed on the public highway • local independent networks, other than radio networks, whose termination points are less than a certain distance apart • certain categories low power, short range radio network infrastructures • radio network facilities which do not use an individual frequency assignment. <p>for services</p> <ul style="list-style-type: none"> • Article L34-1 Authorisation by the telecommunications Minister for the provision of a public telephone service • Article L34-2 General authorisation for public telecommunications services other than the telephone service • Article L34-3 Individual licence for public telecommunications service using radio frequency spectrum issued by other authorities and not covered by article L33-1 • Article L34-4 Declaration for the provision of telecommunications services other than the telephone service, over networks established in accordance with the Broadcasting Act <p>This legal framework entails that the different actors providing mobile services on the different levels set out before, are subject to different licensing procedures and conditions.</p> <p>The operators of the network for public mobile communications is subject to an individual licence according to article L33-1. This licence includes the right to set up and operate the network (base stations, mobile switching centres and other installations) and provide telecommunications services.</p> <p>Service providers, not having an own network, are subject to general authorisation.</p> <p>The licence issued by the Minister gives the right to use a range of frequencies.</p>
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	However, the assignment of frequencies needs to be done in a Flexible way. Therefore an administrative document, issued by ART and supplementing the licence includes technical details and the channels taken into service.
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Comparison licensing of Fixed and Mobile sectors in France

	<i>fixed</i>	<i>mobile</i>
<p>1. operating own new network</p> <ul style="list-style-type: none"> • Article L 33-1 : Establishment and operation of public networks • Article L 33-2 Establishment of independent networks • Article L 33-3 <ul style="list-style-type: none"> • private networks • pay phones not installed on the public highway • local independent networks, other than radio networks, whose termination points are less than a certain distance apart • certain categories low power, short range radio network infrastructures • radio network facilities which do not use an individual frequency assignment. 	<p>Authorisation by the Minister Authorisation by NRA</p> <p>General authorisation</p>	<p>Authorisation by Minister Authorisation by NRA</p> <p>General authorisation</p>
<p>2. services</p> <ul style="list-style-type: none"> • Article L34-1 The provision of a public telephone service • Article L34-2 Public telecommunications services other than the telephone service <ul style="list-style-type: none"> - bearer data - voice to CUG - premium rate - other services to the public - resellers of capacity or airtime - resellers of subscriptions • Article L34-3 Public telecommunications service using radio frequency spectrum authorised by other authorities • Article L34-4 Provision of telecommunications services other than the telephone service, over networks established in accordance with the Broadcasting Act 	<p>Authorisation by Minister</p> <p>General authorisation</p> <p>not relevant not relevant</p> <p>usually covered by L33-1 if not indiv licence</p> <p>Declaration</p>	<p>Authorisation by Minister</p> <p>General authorisation</p> <p>not considered telecom service</p> <p>usually covered by L33-1 if not indiv licence</p> <p>Declaration</p>

<p>Germany</p>	<p>The existing licences for mobile communications in Germany cover the setting up and operation of the network (base stations, mobile switching centres and other installations) and the carrying of traffic for the provision of service based on a certain standard.</p> <p>Terminal equipment for the public mobile systems included in the study is covered by a class licence.</p> <p>In the new Telecommunications Act, distinction is made between individual licence and notification.</p> <p>According to §6 of the Telecommunications Act of 1 August 1996, a licence is required by anyone :</p> <ol style="list-style-type: none"> 1. operating transmission lines going beyond the limits of a property and used to provide telecommunications services for the public 2. offering voice telephony on the basis of self-operated telecommunications networks. <p>There are four classes of licences:</p> <ol style="list-style-type: none"> 1. Licence class 1: for the operation of transmission lines, for mobile radio services for the public by the licensee or by other parties, (Mobile Radio Licence) 2. Licence class 2: For the operation of transmission lines, for the provision of satellite services to the public, by the licensee or by other parties (Satellite Licence) 3. Licence class 3: For the operation of transmission lines, for the provision of telecommunication services to the public and whose provision is not covered by Licence Classes 1 or 2 by the licensee or by other parties 4. Licence class 4: For the provision of voice telephony on the basis of self-operated telecommunications networks (this class of licences does not include the right to operate transmission lines). <p>According to §4 of the same act, whoever provides telecommunications services must notify the regulatory authority, in writing, of the startup, modification or termination of operations within a period of one month.</p> <p>This legal framework entails that the different actors providing mobile services on the different levels set out before, are subject to different licensing procedures and conditions.</p> <p>The operators of the network is subject to an individual licence class 1, which gives the right to set up and operate of the network (base stations, mobile switching centres and other installations) and to carrying traffic for the provision of service based on a certain standard. The procedure and conditions will we set out in more detail further in this section.</p> <p>Service providers, not having an own network, are subject to notification.</p> <p>Frequencies are assigned by separate administrative act and the licences are supplemented by these administrative acts.</p> <p>Section 11 of Appendix 2 with reference to Administrative Order 116/1996 states that upon application, licensees will be assigned the frequencies they require to operate, under the licence, provided these are shown in the frequency usage plan for the intended use, are available and are compatible with other frequency usages §§ 47-49 of the Telecommunications Act.</p> <p>In the existing D1 and D2 licences, the frequencies were assigned in the licence.</p>
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	The new legislation gives more flexibility. The licence grants access to a certain frequency range while an administrative supplement to the licence provides technical details on the moment channels are used.
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Comparison of the licensing of mobile and fixed telecommunication services in Germany.

	<i>fixed</i>	<i>mobile</i>
- operating own transmission lines		
- class 1 – mobile	not applicable	needs class 1 licence
- class 2 – satellite	fixed satellite	combined class 1 and class 2
- class 3 – fixed infrastructure (leased lines)	needs class 3 licence	not applicable
- voice telephony on own network		
- class 4 – voice telephony	needs class 4 licence	included in class 1 licence
- operating not on own network		
- bearer data	notification	notification
- voice to CUG	notification	notification
- premium rate	notification	notification
- other services to the public	notification	notification
- resellers of capacity or airtime	not considered telecom service	not considered telecom service
- resellers of subscriptions		
- others		

The Netherlands	<p>According to the Telecommunications Act of 1989 the following licensing regimes apply :</p> <ul style="list-style-type: none"> • general authorisation, for all service provision • class licence with registration for fixed public voice telephony • Individual licence <ul style="list-style-type: none"> - all fixed infrastructure and networks with national coverage - all mobile networks <p>This legal framework entails that the different actors providing mobile services on the different levels set out before, are subject to different licensing procedures and conditions.</p> <p>The operators of the network for public mobile communications is subject to an individual licence This licence includes the right to set up and operate the network (base stations, mobile switching centres and other installations). Service providers, not having an own network, are not subject to any licensing procedure. Only providers of fixed public voice have to notify their service. Licences for mobile operators on the other hand integrate the provision of voice and infrastructure while service providers offering voice services over mobile networks which they do not operate themselves enjoy a general authorisation.</p>
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Comparison of the licensing of mobile and fixed telecommunication services in The Netherlands

	<i>fixed</i>	<i>mobile</i>
<p>Infrastructure</p> <ul style="list-style-type: none"> • Networks and infrastructure with national coverage • Mobile networks • DECT 	<p>individual licence not relevant gen auth</p> <p>individual licence</p>	<p>not relevant individual licence gen auth</p> <p>integrated in infrastructure licence gen auth</p>
<p>Services</p> <ul style="list-style-type: none"> • Voice Telephony • Other liberalised services 	<p>gen auth</p>	<p>not relevant</p>

<p>UK</p>	<p>According to the Telecommunications Act of 1984 the following licensing regimes apply :</p> <ul style="list-style-type: none"> • class licence <ul style="list-style-type: none"> • Self Provision Licence • Telecommunicaitons Services Licence (excluding mobile) • Private Mobile Radio Class Licence • the Satellite Services Class Licence • the Cordless Class Licence • Individual licence <ul style="list-style-type: none"> • International Simple Resale • Personal numbering • Paging • Mobile data • Public Telecommunications licence • Licence for Mobile Operators <p>The first four individual licences are close to a class licence.</p> <p>Whoever wants to run a mobile communications networks with more than one base station (or five base stations in the case of paging networks) need to apply for an individual licence.</p> <p>This legal framework entails that different licensing conditions and procedures apply, depending on the sort of service offered</p> <p>The operators of the networks for public mobile communications are subject to an individual licence. For mobile data and paging, the individual licence is not very different from a class licence</p> <p>Service providers, not running an own system, are subject to class licence. It must be observed that “running a telecommunications system” differs from “operating own infrastructure”. It is a broad notion referring to the control over how the transmission and switching of signals of all nature is made up, accessed and used. In other words, also service providers, not owning a system but leasing capacity, can be considered to run a system</p>
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Comparison of the licensing of mobile and fixed telecommunication services in UK

This table gives an overview of what licence is needed to provide a certain type of service or network. It is compared what is needed in case of provision as fixed or as mobile network or service.

	<i>fixed</i>	<i>mobile</i>
<ul style="list-style-type: none"> • class licence <ul style="list-style-type: none"> -Self Provision Licence -Telecommunications Services Licence (excluding mobile) -Private Mobile Radio Class Licence -the Satellite Services Class Licence -the Cordless Class Licence • Individual licence <ul style="list-style-type: none"> - International Simple Resale - Personal numbering - Paging - Mobile data - Public Telecommunications licence - Licence for Mobile Operators 	<ul style="list-style-type: none"> X X X X X X X X not relevant 	<ul style="list-style-type: none"> X X X X X X

Annex 7 Criteria used in selection procedures

Criteria used during the qualification phase

	Total	BE	DK	FI	FR	GER	NL	NW	PO	SWE	UK	LUX
financial basis/resources	5	X		X			X	X		X		
coverage and expansion rate	1		X									
technical and operational knowledge and expertise	4	X					X		X	X		
financial and commercial feasibility	5	X	X					X	X	X		
general management of the project	1	X										
compliance with telecom regulation	2			X			X					
availability of frequencies	1			X								
competitive aspects of activities as manufacturer of systems technology	1					X						
registered in order to maintain a trade activity and in Register of Collective Persons	2						X		X			
absence of debt to the state	1								X			
have an approved account system	1								X			
maximum of 25% non-Community capital ¹⁷	1								X			
Number of criteria		4	2	3	0	1	3	3	6	4	0	0

¹⁷ This criterion is no longer existent since the entry into force of the new Telecommunications Act in August 1997

Selection criteria

	Total	BE	DK	FI	FR	GER	NL	NW	PO	SWE	UK	LUX
<i>commercial aspects</i>												
tariffs/cost efficiency /price structure	7	31%	X				X	X	X	X		X
efficiency, development of the market	5		X	X	X				X		X	
satisfaction of end user/services in accordance with reasonable needs of users of telecommunications	2			X	X							
relation price/quality	1				X							
effective distribution channels/ expertise to put the appropriate services on the market/ marketing capabilities	4				X	X			X			X
contribution to paneuropean service	2				X					X		
credibility of commercial or marketing hypothesis	2				X							X
competence in mobile market	1		X									
development of the mobile telephony market and integration with other telecom networks	1							X				
<i>financial aspects</i>												
financial capability	4		X						X		X	X
credibility of business plan	4		X			X		X				X
amount willing to pay for concession	1	49%										
amount prepared to invest	2								X		X	
<i>technical aspects</i>												
coverage (geographically or in terms of population)	7	20%	X					X	X	X	X	X
timing of roll-out	7				X					X	X	X
provide services in certain specific areas	1					X						
technical experience	4		X				X		X			X

	Total	BE	DK	FI	FR	GER	NL	NW	PO	SWE	UK	LUX
quality of the service	4		X	X			X		X			
quality of the network	3						X	X	X			
technical viability	2										X	X
range or quality of services/ development of VAS, technically advanced services	7		X	X	X		X	X	X	X		
functional reliable and secure services	1			X								
efficient use of frequencies	7		X		X		X	X	X	X	X	
best promotion of efficiency of the telecommunications market	1			X								
expertise for setting up the network	2					X			X			
systems increasing voice quality	1									X		
technologies permitting international roaming	1									X		
widely accepted technologies	1									X		
<i>others</i>												
structure, size, organisation of the undertaking	1				X							
employment	2				X							X
competitive aspects	4			X		X			X		X	
absence of direct or indirect participation of PTS in capital	1								X			
qualifications exceeding the criteria for qualification	2						X					X
innovation and development	1								X			
quality of bidding on use of DCS-1800	1											X
previous experience in the field	2							X			X	

Annex 8 Licensing conditions

What follows are some elements related to the selection procedure that were examined by IDATE.

Bid bond

A bid bond sets a maximum to the bid. For national paging in Spain the amount is set at 330.000 pesetas.

limit on size of bid

The number of pages which candidates can introduce to the bid assessor is often limited. Austria, Belgium (only for GSM), Denmark, Germany, Ireland, The Netherlands, Spain, Latvia, Lithuania and Slovakia set limits between 300 and 400 pages:

France, Finland, Norway, Portugal, Sweden, UK., Turkey, Czech Republic, Hungary and Latvia don't mention a limit in size.

language

Generally speaking, the language is the local language. In some cases, however, English is accepted (Denmark, Portugal, Sweden, Turkey, Latvia and Slovakia) or permitted for technical annexes (Belgium, Portugal).

price to purchase document

In some countries, the purchase of the document containing the applicable terms and conditions is always free of charge. This is the case in Finland, France, Germany, Italy, Norway, Spain, Switzerland, UK, Malta and Turkey.

The purchase of tender documents for cellular mobile communication is free in Finland, France, Germany, Italy, Norway, Spain, Sweden, UK, Turkey and Latvia.

The Netherlands, Portugal and Lithuania always charge for the document, while Belgium only expect payment in the case of GSM.

candidature assessor

Consultants help the regulator to assess the candidatures in Austria, Belgium (only for GSM), France, Germany, Ireland, Spain, Sweden, The Netherlands, Hungary and Lithuania.

Criteria for selecting the operator

The mobile project team has been asked to provide information concerning the criteria for selecting the operator.

1 Conditions to be respected by the operator

The information contained in this section was gathered partly by IDATE on the basis of a questionnaire. The identification of the different licensing conditions was done on the basis of national legislations and earlier studies ETO did on licensing of services on the fixed network.

The general legislation, the procedure for selection and the individual licence provide a set of rights and obligations.

Within the conditions that have to be respected by the operator, distinction can be made between the following:

1. QUALIFICATION CONDITIONS : conditions the operator has to comply with in order to qualify as a candidate and information to be provided
2. OPERATING CONDITIONS: conditions/rules to comply with while operating the service

1.1 Qualification conditions

nationality of the licensee and foreign ownership restrictions

Constraints on foreign ownership are imposed on all mobile communications in France, Italy, Portugal, Spain, Czech Republic, Hungary, Latvia and Slovakia. For Belgium; constraints are imposed for the GSM licence but not for other mobile systems.

Austria, Denmark, Finland, Germany, Ireland, The Netherlands, Norway, Sweden, UK, Turkey and Lithuania do not impose constraints.

(It should be further examined if foreign ownership means "outside EU" or "outside the nation")

legally registered representative

A local presence is imposed for 12 out of the 20 countries.

technical capability

These requirements are related to the technical ability of the operator to run the network. It can be proven by reference to experience in other countries or in other similar markets or the mentioning of the qualification of the staff. These conditions are imposed in all countries for all systems, except in Norway and Turkey. Spain doesn't apply the criterion for paging.

economical structure and financial viability

In order to be assured that the operator has a financially healthy position, France (except for telepoint) Finland, Ireland, Italy, Portugal, Spain, Hungary investigate if the resources are sufficient to carry out the necessary investments.

Belgium, Denmark, Germany, Norway, Switzerland and Turkey have no questions of the kind.

accounting rules

Specific accounting rules concerning the separation of accounts from other activities are imposed in Denmark, France, Italy, the Netherlands, Norway, Portugal; Spain and UK.

exclusion because of activities in other mobile technologies

In some countries, it is the policy to stimulate competition by avoiding concentration of too much spectrum with one operator. Therefore, all GSM operators which were already operational at the moment competition was introduced, were excluded from access to the spectrum opened to competition.

In the same context, operators of GSM were excluded in the first instance from the awarding process of DCS-1800 licences in UK and Germany. In Finland, this was not the case. France applied a specific regime where the GSM-operators obtained experimental DCS-1800 licences for one single city¹⁸ but were for the rest excluded from obtaining a national DCS-1800 licence

Whether DCS 1800 is an extension of GSM or already a step closer to PCS is a point on which countries have different opinions. In this respect, the ERO study on DCS 1800 states : “This is probably a sign for the evolutionary process that public mobile communications are going through and also indicates the different national market requirements that have emerged out of the past development of mobile services in specific countries.”

exclusion because of activities in the same technology

In most of the EEA-countries, the GSM-service was initially part of the monopoly of the PTO. When competition was introduced later on, the PTO was not allowed to compete for additional spectrum.

1.2. Information to be provided

operator’s identification

In all cases and all countries, the candidates have to identify themselves.

connection to PSTN

As a general rule, networks can be connected to PSTN though Belgium and Denmark are the exceptions. There, PAMR carrying besides data also voice may not be interconnected to PSTN.

roll-out of the network

The conditions concerning the roll-out of the cellular networks (GSM and DCS-1800) can be related to the coverage of the territory (including coverage of the highways) or to the population. In most of the countries, both criteria are used (Austria, Belgium, Denmark, France, Italy, Norway, Portugal, Spain, Lithuania, Slovakia). The Netherlands, Sweden and Hungary only impose conditions in terms of coverage of the most important cities, while France has only a criteria concerning population coverage. Finland has imposed a nationwide service by the year 2000. Norway expresses the obligation in terms of a certain number of base stations per county. The timescales vary from an obligation to serve 35% of the population by the launch to a period of 8 years for serving 99% of the population. Belgium is also the only country where a differentiation in obligations has been found between 8W and 2 W terminals.

The percentages and timescales look very different. But the tendency is that all countries organise it in a way that the most densely populated regions are covered first.

¹⁸ France Telecom was given a DCS-1800 license for Strassbourg and SFR for Toulouse

1.3. Conditions of operating

base site sharing

Base site sharing is allowed everywhere. Belgian legislation stipulate in a general way that it should be encouraged but no specific measures are taken. In Finland, base site sharing is obligatory as well as in Turkey for Turk Telecom.

Moreover, Telemalta is obliged to provide towers and sites for competing paging networks where required in Malta.

competition rules, fair trading

Three commercial considerations were examined:

- the subsidising of terminals with network profit
- the subsidy of only the own retail
- the obligation to commercialise service through service providers.

Usually, these provisions are the same for all networks and services.

Historically, market growth has been driven by airtime tariffs, disposable income, coverage, population and the price of handsets. At this moment in time, disposable income, coverage and population are not likely to have high growth rates. This means that handsets and tariffs will be the main drivers. The subsidy of terminals is, therefore, an important issue.

The **subsidising of terminals with network profit** is not allowed in Finland, Slovakia and Turkey. In Sweden and UK, connection bonus are given, which have the same effect.

In Czech Republic, Latvia and Lithuania, operators are allowed to **subsidise only their own retail**.

If the operators subsidise the price of terminals from network revenues, or subsidise only their own retail, this may drive all other handset retailers out of business unless a subsidy (for example, a connection bonus) is available on the same terms to all dealers or service providers.

Infrastructure for linking the operational centre and the base stations

In Belgium, Norway and Portugal, there was an obligation for mobile operators to use leased lines from the operator holding the monopoly on fixed infrastructure at the moment the GSM licences were given. In the Netherlands, a licence for mobile communications does not permit the licensee to install own fixed infrastructure. As these countries transpose directive 96/2¹⁹ and directive 96/19²⁰, this has been changed since.

Hungary allows no use of alternative infrastructure and, in Latvia, the liberalisation is limited to microwave links. The use of microwave links is allowed in all countries, although sometimes as a last resource.

roaming

see annex 10

¹⁹ Commission Directive 96/2/EEC of 16 January 1996 amending Directive 90/388/EEC with regard to mobile and personal communications, OJ L 20/59, 26.01.1996

²⁰ Commission Directive 96/19 amending Directive 90/388/EEC with regard to the implementation of full competition in telecommunications markets, OJ L 74/13, 22.3.1996

universal service rights and obligations

In the case of *universal service*, certain countries mentioned national coverage, 24 hours a day availability, non-discrimination of users or free access to emergency services. Depending on the definition that is given to universal service, all of these elements could be considered universal service obligations. But other countries replied according to the definition of USO in the Communication of the European Commission. In this study, universal service will be used as defined in In order to avoid any further misunderstanding, all four of the elements (priority in case of emergency and disaster, quality of service, availability national and non discrimination of users) will be taken into account separately, not under the heading “universal service”.

priority in case of emergency and disaster

For cellular communications, this condition can be found in Denmark, Finland, Germany, Hungary, Ireland, Norway, Portugal and the UK. In the case of paging Denmark, Portugal, Czech Republic, Latvia, Lithuania and Slovakia included it. For PAMR, Latvia, Lithuania and Portugal impose it while France and Spain do not.

quality of service

For cellular services, Finland, Norway, Sweden and UK do not impose any conditions of this kind. The Netherlands imposed parameters only for GSM, not for DCS-1800. Regarding the other countries, the maximum rate specified in licences for call loss varies from 2% for the region outside Paris²¹ in France to 1% in Portugal. In the case of paging services, France, Portugal and Spain specify quality obligations. These last two countries also impose this sort of conditions on PAMR-networks.

maximum period foreseen to start the provision of service (months)

This condition is directly linked to spectrum efficiency. It involves that the operator must be operational within a certain period of time and, thus, use the frequencies assigned. In the S-PCS sector, this concept is also found and is elaborated in *Milestones for the introduction of S-PCS*.

The following countries do not specify anything : UK, Denmark, Finland, Switzerland and Hungary. Sweden bases the duration on the surveillance of the market.

For the other countries, concerning GSM , the period varies from 4 months in Slovakia, 6 in Austria , 8 in Belgium, 9 in Latvia to 1 year in France, Italy, Czech Republic, Lithuania until 18 months in Portugal and 2 years in Norway. In The Netherlands, the time to become operational is part of the bidding process for GSM. In the case of DCS-1800, one of the licensing conditions is that frequencies must be used at the latest 1 year following the granting of the licence.

For the other mobile systems the period is usually shorter, 6 months for paging in the Czech Republic and Lithuania or 4 months in Slovakia and 1 year in Malta and France. Belgium, on the contrary, has a longer period of 18 months for PAMR and mobile data.

licence covers building and operating of DECT network or access to other frequency bands

Directive 96/2 stipulates : *“Licensing conditions should not include unjustified technical restrictions. Member States may not, in particular, prevent combination of licences or restrict the offer of different technologies where multistandard equipment is available”*

²¹ The rate for Paris is 4%/

Therefore, it is worth examining if the licence for GSM gives access to other frequency bands.

In Denmark and The Netherlands, GSM-operators can build and operate a DECT-network under their GSM-licence. In Sweden, the authorisation cellular mobile communications is a combined GSM and DCS-1800 licence while for DECT, no authorisation is required .

2. Other licensing elements

duration - prolongation

Regulators limit the duration of the licence in order to be able to recover the frequencies in the eventuality that this might be needed for other systems. The extent of the period must, however, be long enough to enable the operator to make a profit out of the investment.

The shortest durations are 2 years for PAMR licences in Lithuania and 5 for GSM licences in Latvia.

A ten year period is mentioned in the GSM-licence in Denmark, Sweden and Lithuania as well as in the paging licences in The Netherlands, Spain, Switzerland and Lithuania. PAMR and mobile data or limited to 6 years in Belgium and to 10 years in Spain. In the case of telepoint, France gives licences with a duration of 15 years.

For cellular licences, 15 year is a very common period. It can be found in Austria, Belgium, France, Ireland, Netherlands, Norway, Portugal, Spain, Hungary, Slovakia and Turkey as well as for paging licence in Czech Republic and Slovakia.

Cellular licences in Germany and Czech Republic have an extent of 20 years, only exceeded by UK, where it is 25 years. The licences in Germany and UK, however, have a fixed duration. In all other countries, prolongation is possible and is even often automatically granted from year to year.

Finally in Finland, duration is unlimited and at least 10 years

withdrawal

The withdrawal of licences is mentioned in all countries. The reasons for revocation may be the following: f

- failure to fulfill the terms of the licence
- failure to pay fees
- change in ownership or in the composition of the capital of the operator
- bankruptcy, liquidation or receivership
- failure to eliminate interferences caused by the licensee's station

appeal

In all countries appeal for unsuccessful applicants is possible.

reporting

The goal of reporting duties is to assure the regulatory authority that the conditions imposed by general legislation or by authorisation are being met.

The information that must be provided can consist of company development plans, the annual report, details on the network roll-out or coverage, the number of subscribers, tariffs, roaming agreements or quality of service parameters as there are blocking-rates, call drop rates, delay for connection of new subscribers, frequency and duration of interruptions or response time for assistance.

Austria, Latvia, Slovakia and Turkey did not mention any reporting duty.

In the other countries, the obligation must be carried out usually on an annual basis, except for Spain where the report must be sent quarterly and Belgium where the interval is six months. In Portugal, quality of service indicators and activity parameters are expected quarterly while the provision of financial statistics happens on a yearly basis.

France requires a proof of a commitment of the operator of public networks to contribute to standard setting and training and research.

Hungary occupies a special place because there the operator is obliged to keep the public informed about the pace and progress of implementation plans by publishing public announcements in two national and one local daily paper.

control of tariffs

Austria, Denmark, Germany, Norway, Spain, Czech Republic; Slovakia, Hungary and Turkey mention some control of the regulator on tariffs. Usually it means that a change in tariffs must be reported before hand. In Finland, France, Portugal, Sweden, The Netherlands, UK, Czech Republic, Latvia, Lithuania and Slovakia, the regulator does not influence the tariffs.

interception of calls

Provisions for the legal tapping of communications exist in all countries. The Netherlands stipulate that all necessary investments for legal tapping have to be borne by the licensee. In Portugal it is required that entities that establish and provide public telecommunications services are obliged to install systems appropriate to the legal interception of communications, at their own expenses and to provide them to the legally responsible authorities.

licence transferable

Individual licences are personal licences. This means that a change in chair holding or ownership implies agreement of the regulator to transfer the licence to the new legal entity.

entry of numbers in the directory and directory inquiry provision

The numbers of subscribers to cellular systems can be found in specific directories. Austria, Denmark, Germany, Sweden and Czech Republic have an obligation to list the numbers in a directory, unless the subscriber disapproves of it.

Finland, France, Portugal, Spain, Slavakia and Turkey do not oblige the operator to provide an inquiry service. Norway can be added to this list but, the situation will change in the near future. From a consumer's perspective, the provision of a directory inquiry service is very useful.

In Ireland, The Netherlands, Hungary, Latvia and Lithuania an inquiry service must be provided but no directory. Finland, France, Portugal, Spain, Slovakia and Spain have neither of the two obligations.

absence of debt to the state

Only Portugal has this requirement.

Annex 9: Competition aspects

<p>Finland</p>	<p>Chapter 6 section 20 of the Telecommunications Market Act of 1997 says that a telecommunications operator shall differentiate the business operations consisting of the provision of telecommunications network services and telecommunications services from each other as well as from its other business operations.</p> <p>The Ministry may order that:</p> <p>2) the different parts of the operations of telecommunications networks and telecommunications services shall be differentiated when the telecommunications operator has a significant market power in more than one of the telecommunications networks or services offered by it; as well as that</p> <p>2) the provision of paragraph 1 shall not be applied to a telecommunications operator whose telecommunications operations are of minor importance.</p> <p>According to section 21 concerning Financial Statements, differentiation shall mean that an income statement shall be drawn up for each financial period of the operations to be differentiated and, in the case of telecommunications network operations, also a balance sheet. The income statement and balance sheet, which shall be derivable from the accounts of the companies, shall be drawn up in accordance with the provisions of the Accounting Act (1973/655), where applicable.</p> <p>If a telecommunications operator with a significant market power operates in its telecommunications network also as a telecommunications service operator, the rent from subscriber lines taken into its own use shall be entered in the income statement in accordance with the same principles as it uses to collect payments from other telecommunications service operators under section 18, paragraph 3, subparagraph</p>
<p>France</p>	<p>In general, it is the application of competition law and commercial law that should guarantee a fair level of competition.</p> <p>The only requirement in telecommunications legislation is article L33-III which requires an operator with an annual turnover exceeding a threshold set by the telecommunications minister and the minister for the economy to keep separate accounts for the different activities.</p> <p>Moreover, if the competition authority considers that an operator enjoys a monopoly or dominant position in a sector other than the telecommunications sector, and the infrastructure used for this activity may be separated, the operator shall be required to separate activity from his telecommunications activities on a legal basis for the purpose of fair competition.</p> <p>In reality, all public mobile communication services are offered by entities which only have that mobile activity.</p> <p>Fair level of competition between independent service providers and those owned by an operator</p> <p>No other requirements than separation of accounts or activities, as set out before.</p> <p>Fair level of competition between different mobile technologies</p> <p>Licencees of GSM were excluded from tendering for a national licence for DCS-1800. However, they could obtain experimental licences in two cities. These experimental licences did allow the commercial provision of the service. The goal of this procedure was to attract a new third national operator for digital cellular mobile voice services. On the other hand, the existing operators in the 900 MHz were given the opportunity to gain experience with service in the 1800 MHz band in the perspective of solving future problems of saturation in the 900MHz band. This experience could also be an advantage when French licencees participate to tender</p>

	<p>procedures abroad. It is not explicitly foreseen that existing mobile licences can be broadened in the future to include automatically new technologies. Existing operators are not excluded from participating to future tenders neither</p> <p>Fair level of competition between mobile and fixed communications services As set out before, competition law applies and there is an obligation for a separation in the accounts or activities of entities having activities in the fixed telecommunications sector as well as in the mobile sector.</p>
Ger	<p>Fair level of competition between independent mobile service providers and those owned by an operator Mobile licences include specific clauses concerning the fair treatment of service providers²².</p> <p>First of all, licencees are obliged to admit suitable service providers. This service providers can be simple resellers of the licencees mobile communications service or the service provider can develop and offer to their customer additional services. However, the licensee or any company affiliated to him who wants to become a service provider on other mobile communications markets, has to inform the NRA. Service provision for the analogue cellular or GSM network or for operators offering the same product on the same regional or national market as the licensee is even totally prohibited²³.</p> <p>The service providers have to be selected and admitted according to objective criteria, taking into due account the principles of equal treatment and reasonableness. This means that the licensee should refrain from binding them exclusively of for an unreasonable period of time, and refrain from imposing any restrictions on them as regards their own pricing and terms or as regards any other field of activity.</p> <p>Finally, it is explicitly stated that the licensee shall not put the service providers at a disadvantage to his own marketing organization and may not discriminate between the service providers. This applies particularly to conditions and transfer prices for network operation services.</p> <p>Fair level of competition between different mobile technologies It depends on the service and the objective of the NRA whether licencees which already operate services on the same relevant market but with another technology can participate to the tender or auction.</p> <p>The relevant market for analogue mobile, GSM and DCS-1800 is considered to be identical. The following entities having already licences for other technologies, were not eligible for the DCS-1800 licence: any company which has merged with Deutsche Bundespost Telecom Mannesmann Mobilfunk GmbH and any company which has merged with it any company operating as a service provider of one of these companies for the C,</p>

²² Condition 17 of tender specifications for a licence for the provision of a digital cellular mobile radio network in the Federal Republic of Germany based on DSS1800 (E1 Network), 12.06.1992

²³ Condition 7.2 of the standard licence for the setting up and operation of a digital cellular mobile radio network (E1 network)

	<p>D1 or D2 mobile communications network.</p> <p>In the case of ERMES, the operators of analogue paging were not excluded from participating to the bidding for digital paging licences. In fact, all of them obtained licences.</p> <p>For the future, the possibility is foreseen that ²⁴ DCS-1800 licences can be broadened if the European DCS 1800 standard is overtaken by new technical developments within the contractual period, if one or both GSM network operators are taking part in the new developments and effective competition between network operators cannot otherwise be established.</p> <p>Furthermore, tenderers must state²⁵ whether they are licensees in other fields of mobile communications in the Federal Republic of Germany , or whether they have undergone a merger with such a licensee at home or abroad.</p> <p>Examples are found of excluding existing operators from tendering for a licence under a new technology a priori in the telecommunications specific legislation. This can be done through telecom specific legislation or through competition law. granting licences for new technologies to existing operators on the same relevant market.</p> <p>The decision is taken on a case-by-case basis depending on whether the goal is to create competition between different technologies within the same relevant market (e.g. competition between GSM and DCS-1800) attract new entrants (e.g. the new tender for a second DCS-1800 licence) avoid misuse of dominant position (e.g. statement of having licences in other fields of mobile communications or mergers under normal competition law) to develop services under new technologies (e.g. ERMES).</p> <p>Fair level of competition between mobile and fixed communications services</p> <p>The tenderer must provide a clearance certificate from the Federal Cartel Authority²⁶. Therefore it is possible that activities in the fixed telecommunications sector are taken into account when granting mobile licences, and vice versa.</p> <p>Mobile licences are restricted to the setting up and operation of the network and the provision of the technology under tender and to the provision of other mobile communications services. In other words, the licensee may only use the transmission lines to provide those services which he is entitled to provide under the conditions of this Licence. The provision of transmission capacity for other purposes shall not be permitted. However, the licensee of GSM and DCS-1800 are entitled to make transmission capacity available to the operators of digital cellular networks.</p> <p>Under the current licences, mobile operators do not have the right to use their network to provide fixed services. The fixed links they are authorised to set up, must be part of the construction of their network to provide mobile services.</p>
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²⁴ Condition 2.1 of the standard licence for the setting up and operation of a digital cellular mobile radio network (E1 network)

²⁵ Chapter II, section 1.3 of the tender specifications for a licence for the provision of a digital cellular mobile radio network in the Federal Republic of Germany, based on DCS-1800, 12.06.1992

²⁶ Chapter III, section 1.2 of the tender specifications for a licence for the provision of a digital cellular mobile radio network in the Federal Republic of Germany, based on DCS-1800, 12.06.1992

<p>The Netherlands</p>	<p>Fair level of competition between independent mobile operators and those owned by an operator According to the Telecommunications Act, mobile operators have the obligation to give access to their network in reply to every reasonable request of a service provider. The holder of the licence has to make public tariffs and technical specifications for access to its network. These tariffs and specifications have to be applied in an objective and non-discriminatory way. For service providers, the telecommunications Act does not include specific rules concerning exclusive contracts or mergers. Normal competition and commercial law applies here.</p> <p>Fair level of competition between different mobile technologies GSM and DCS are seen as equivalent services, using only a different technology for the air interface. As it is the intention to attract newcomers to the market, the existing GSM operators have been excluded from obtaining two major blocks of frequencies put to auction in the DCS-1800 band. They can however bid for the other block although they will be prohibited to use these frequencies for the first two years if they obtain them. Operators of analogue paging, on the other hand, have been admitted without any restriction to enter bids for the ERMES licences. In fact, the two existing operators of analogue paging were the only candidates for ERMES licences. Mobile licences cannot be broadened to include automatically new technologies.</p> <p>Fair level of competition between the mobile and fixed communications services Activities in the fixed sector are not taken into account when issuing licences for mobile communications.</p> <p>Fair level of competition with mobile operators, having exclusive rights in the the telecom or in other sectors, at home or abroad A financial separation of activities is imposed for operators having in the Netherlands or abroad exclusive rights in another sector than telecommunications a yearly turnover exceeding 50 million ECU in telecommunications. Some operators of public mobile services are subject to these provisions. Enertel is linked with companies having exclusive right for the provisions of electricity. One of the partners in Libertel is Vodafone who also participates in the running of mobile services in other countries.</p>
<p>UK</p>	<p>Fair level of competition between mobile service providers</p> <p>Currently all operators have conditions in their licences which oblige them to supply Mobile Radio Telecommunications Services on written request to any service provider who asks for it as long as they are financially sound and likely to sell on the services in a proper manner. In the future this may only be the case for those operators that are deemed by the DG to be “well established” operators. At the moment, no mobile operator may discriminate against the independent service providers compared to the own retailers. In order to avoid cross subsidy, OFTEL has monitored the cost of acquisition of customers for service providers. A formula is used to make sure that the value of the subscriber is not exceeded by a subsidy (f.ex for handsets) and charges have to be published.</p>

OFTEL have recently incorporated a Fair Trading Condition that reFlects the content of articles 85 and 86 of the Treaty of Rome which deal with anti-competitive behaviour.

Two forms of potential restriction are treated in particular: abuse of dominant position and arrangements with other undertakings.

The following practices are prohibited because they are considered **an abuse of dominant position**:

- directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions
- limiting production, markets or technical developments to the prejudice of consumers
- applying dissimilar conditions to equivalent transactions with other parties, thereby placing them at a competitive disadvantage
- making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contract

Concerning arrangements with other undertakings, there is

- a prohibition on certain exclusive dealing arrangements (e.g. clauses which restrict service providers to obtain telecommunications services from any other person, are illegal)
- a prohibition on linked sales (Licensees may not make service provision subject to conditions on the acquisition of other telecommunications services – except where these services cannot be provided without them- or the acquisition of any apparatus).

Licensees for e.g DCS-1800 can become service provider on for example a GSM-net.

Fair level of competition between different mobile technologies

GSM operators could not be attributed DCS-1800 frequencies. For UMTS, non of the existing GSM or DCS-1800 licencees will be excluded from participating to the auctioning.

On the other hand, their existing licenses do not automatically cover new technologies although they cover new developments of the existing technology. Under the existing GSM licences, services developed

Fair level of competition between mobile and fixed communication services

The fixed and the mobile sector are considered as separate markets. Fixed operators have at the moment more obligations concerning the provision of information to the customer, providing the NRA with information or direct emergency calls.

Annex 10 Roaming and facility sharing.

BE	GSM operators are obliged to be members of the GSM-MoU and to enter into international roaming agreements. National roaming is not regulated at all. Facility sharing is encouraged but no regulation is put in place.
DK	International roaming is guaranteed through the obligation for operators to sign up with the GSM-MoU. Operators have to agree to national roaming agreements if this is technically and economically feasible. In practice, national roaming cannot be denied if it can be documented that hand-over is possible. These national roaming agreements are concluded on a commercial basis. Unlike the interconnection agreements, there is no obligation for cost-orientation, no reference offer nor arbitration from the NRA. Both Mobilix and Telia have entered into such a national roaming agreement with Sonofon at the same conditions.
France	Mobile operators in France are free to conclude national roaming agreements on the basis of commercial agreements. However, there is no obligation. If operators decide to do so, they have to inform ART in order to ensure that the conditions of fair competition are respected. The licences state that the Minister can make national roaming mandatory in certain parts of the country in order to complete the coverage.
Ger	Roaming agreements are fully commercial agreements. At the moment, discussion is taking place concerning site sharing.
Lux	Roaming is not regulated in a general way other than to require licence holders to conclude international roaming agreements with foreign mobile networks. Mobile operators are free to enter into commercial agreements for national roaming. This principle applies equally to the possibility for roaming between mobile and satellite operators.
Por	International roaming is not regulated. National roaming is allowed as well (although it has been discouraged). Sharing of infrastructure allowed and shall be ensured, under the terms and conditions to be agreed between parties, by means of protection of the environment, the arrangement of the territory and the defence of urban and rural landscape. Whenever the entities involved do not reach an agreement the regulator (ICP) shall decide based on cost-oriented criteria
Swe	In Sweden, national roaming agreements do not exist. Roaming agreements depend completely on whether agreements can be made between operators. The legislator and the licensing agency does not regulate the issue. It is neither compulsory, nor prohibited
Net	Roaming agreements are in principle commercial agreements, left to the market. However, in certain cases national roaming can be imposed by the NRA for a limited time in order to permit a new operator to offer services and generate revenue before the network is rolled out fully. This will only be done upon request of the licensee. The two licensees, obtaining the 2 DCS licences with an obligation of national coverage, could ask the NRA to impose to the GSM-operators to negotiate national roaming agreements with them on a commercial basis. Sharing of antenna sites must be allowed from the moment that the owner of the sites agrees to it. Licensees of other public mobile networks or siteowners, controlled by another licensee cannot refuse reasonable requests for sitesharing.
UK	There is an existing facility in the current mobile licences allowing inter-system roaming in the event that it should be required in order to satisfy the coverage obligations in the short term. In the event none of the operators has needed to so as they have all met their obligations well ahead of time. Possibilities for roaming between mobile and satellite services. Currently the mobile licences do not allow this, but UMTS will require it.

Annex 11 Comments expressed during the workshop

On 9 June 1998 ETO held a workshop at which it presented the results of its study on licensing conditions for mobile communications. The participants included telecommunications operators, service providers, European Associations, representatives of the European Commission, industry and administrations. Discussion took place concerning ETO's proposals on

- licensing procedures and criteria for qualification and selection
- ensuring fair competition and non-discriminatory access to the network and databases of public mobile operators
- roaming and facility sharing
- duration of licences
- interconnection
- further studies on Wireless Local Loop and fixed/mobile convergence

Written comments were invited before 25 June. Comments were received from seven operators, a consultant and a manufacturer.

All of the comments have been grouped according to the six subjects mentioned above. They are preceded by general comments and questions. The views invited by the Commission on the need for harmonisation and *a priori* regulation on a European level are summarised in section 4. One comment was received one month after the deadline. Due to the fact that the report had by then been adopted by ECTRA, no specific references are made included. It can, however, be mentioned that the comments were fully in line with comments already made by other participants.

1. General comments and questions

- An operator asked for clarification of the status of the report and the extent to which it was possible to add input during the workshop or by written comments. ETO explained that ECTRA would be asked to approve the report before the end of July. Written comments are welcome until 25 June. A summary of the comments received would be annexed to the report. If strong opinions were expressed against the proposals or if arguments were provided which had not been considered, the proposals could be modified. The Commission was not tied to the recommendations submitted by ETO but the conclusions of the study could be a basis for ECTRA recommendations. The Commission added that the ETO report was a focal point and constituted a result in itself. Comments could be sent either to ETO or to the Commission.
- Two operators observed that the study included a full regulatory framework, which covered more than licensing conditions *stricto sensu*.
- A satellite operator stressed the usefulness of considering the satellite part of UMTS and would be interested to see if some procedures applied to present systems could be valid for UMTS (e.g. MRC procedures or extension of the scope of the GMPCS MoU Arrangement). The opinion was expressed that auctions should be strongly discouraged for UMTS satellite components because they would lead to non-harmonised use of spectrum. This comment was confirmed by e-mail. ETO and the Commission replied that the study covered the terrestrial component of UMTS. Covering also the satellite component *in extenso* was beyond the scope of the study. Moreover, ETO had already carried out a separate study on satellite services and networks which included the licensing of the satellite component of UMTS. The report on Mobile Communications would, however, mention in chapter 5 that UMTS differed from

second generation mobile systems in the respect that it also comprised a satellite component and reference would be made to the ETO Satellite report.

- A representative of a radio regulatory agency wondered whether the fact that UMTS is intended to offer multi media services would affect licensing procedures and conditions. ETO replied that this report was only a preliminary input for the licensing of UMTS and that study of questions concerning access by new services to any kind of network was foreseen in the future ETO work programme. It was recognised that a specific licensing regime for service providers should be established.
- A mobile operator discussed the assumption that the available spectrum would only allow for two UMTS operators. ETO replied that reference had been made to the ERC decision. Since the interim report the situation had, however, evolved and this would be corrected in the final report.
- In a written contribution from another operator, received by e-mail on 18 June, it was stated that in some countries it could be the case that the spectrum only allowed for a maximum of two operators. "It would be wrong to only licence each operator with what is thought to be the minimum spectrum required. UMTS operators will need to compete with evolving GSM networks and will therefore require comparable amounts of spectrum per operator, especially since UMTS will offer higher speed services. Otherwise the UMTS operator will have a lower capacity and/or need smaller cell sizes, threatening the business case. Therefore the "correct" spectrum per operator will depend also on spectrum allocation per existing GSM operator and will vary nationally."

2 Licensing procedures/ criteria for qualification and selection

- ETNO supported the recommendations concerning the harmonisation and the transparency of selection criteria.
- Written support was received from a mobile operator on 23 June. It was specified that parameters for primary selection criteria should take into account country specific requirements.
- A regulator also fully supported the recommended selection criteria but was not convinced that in a competitive market regulators should be concerned about "tariffs and prices". ETO agreed but pointed out that this was an element to be used to select the candidate which offered the most benefit to the consumer. Furthermore, using "tariffs" as a selection criterion did not imply any regulation of the level of the prices and in a competitive market no *a-priori* conditions should be imposed on commercial issues.
- In a letter, dated 15 June, an operator supported the opinion of the regulator mentioned above. In that same letter, it was stated that "if an NRA decides to auction the UMTS spectrum, it should be made mandatory that the licensing conditions do not allow a resale of spectrum and/or a use of spectrum for other than UMTS purposes. It is absolutely necessary for the prevention of dummy bids that, if the operator does not fulfill its licensing (coverage) obligations, he has to give back the licence and spectrum to the NRA without any form of compensation."
- A mobile operator asked for clarification concerning the use of "quality of service" as a selection criterion. ETO replied that, in the same way as with prices, the use of a selection criterion did not imply necessarily that minimum levels of performance were set. It was again a question of using criteria which led to giving priority to the interests of the consumer in the choice of operator and to guaranteeing transparency on the actual level of performance of operators on the market. The Commission added that this was not a

question of interfering in terms of regulatory prescriptions. On the issue of “efficient use of frequencies”, however, national regulators needed to include specific obligations in the licences.

- An operator suggested including reference to the innovative aspect of the service in addition to the quality of the service. Another operator made the same suggestion in a letter dated 22 June.

ETO explained that the proposal was based on the criteria which were found to be most common for the selection of second generation mobile operators. For UMTS the offer of innovative services should be considered as an important element. Therefore, ETO agreed to include this aspect in recommendation 3.

- A satellite operator made the remark that it was difficult to determine in which way frequencies have to be used by operators as efficiency was part of the design of the system and depended also on the way the network was implemented. He had not experienced that conditions of implementation had been established and therefore wished to know if ETO or ERO had carried out studies as to how the efficient use of frequencies had been implemented in the land mobile or satellite environment.

A representative of ERO referred to a study conducted on traffic loading of mobile networks (GSM-DCS1800). The study had been finalised and published and is available from ERO for interested parties.

- A consultant wanted to know if preference rights for certain categories of second generation mobile operators had been considered, taking into account the timing of the authorisations given to the newest second generation operators and those for UMTS. This could be in particular an incentive to invest for the third or fourth operators who had just been granted licences or were in the process of being granted licences.

ETO replied that the recommendation was in principle to organise a procedure where all candidates had the same chances but, in the recommendation’s second sentence, room was left for excluding some existing operators from participating in the selection or for granting them preferential rights for reasons of fair competition. Preferential rights and exclusion should be exceptions but it would be up to NRAs to decide, depending on the national situation.

- An operator in a fax of 22 June expressed the view that circumstances warranting exclusion of existing operators were extremely unlikely in European markets. It was argued that without the investment of existing operators the UMTS market could not develop competition in an effective way. Besides, if existing operators were allowed to operate third generation services in the future, this would ensure that the new market would be at least as competitive as the current one. Therefore, the operator proposed “to develop a secure migration path from second generation to third for the existing mobile operators. Accordingly, the prudent recommendation at this point is in fact to suggest that states may, in consideration of their own market conditions, choose to award third generation spectrum automatically to existing operators (...) in particular where there are four or five existing mobile operators”.
- Similar wording is found in a fax from another operator. It is proposed to “leave the door open for the NRAs to award third generation spectrum automatically to existing operators.” The reason for this is that “(...) it is more likely that existing operators will have to deal with more disadvantages when it comes to developing third generation services relative to new licences than new entrants as they are already suffering consequences from former heavy investments and continue to invest in capacity and service for existing customers.”

- In a written contribution another operator was of the opinion that the ETO recommendations did not sufficiently consider the role of market forces, in particular the existence of several UMTS operators and service providers.
- A new pan-European operator wanted the key issues to be regulated on a European level. One of these issues was to clarify from the beginning which operators would have the possibility to be granted a new licence in the future and which would not. In the past, the company had had bad experiences where this decision had been left to the national regulator.

3. Licensing conditions

3.1 Ensuring non-discriminatory access to the networks and databases of public mobile operators

- Two mobile operators asked for clarification about how the recommendation that mobile operators should give access to their customer database should be interpreted. Does customer database mean the records of customers or only addresses or names? A third operator expressed concern about non-discriminatory access to the customer database in so far as the database constitutes a distinctive marketing advantage for companies.

ETO clarified that “access to customer database” referred to access to “directory information” and not to consumer profiles or any sensitive commercial information. The proposal would be revised in order to reflect this.

- Another operator distinguished between service provider access as an open interface activity in the context of standards and service provider access as regulated activity. It was clear that, if the problems of the scarce resources were to be overcome, service providers needed some protection and some access to networks. This could, however, be left to the standards arena and would not require licences from NRAs.
- One of the mobile operators mentioned previously expressed doubt as to the effect of service provision in general, and recommended clarification of the understanding of service provision (from tied resellers to virtual network operators). Furthermore, it was stated that regulatory provisions on special access for service providers could discourage operators from investing in networks. It was stated that competition in services should only be considered in those countries which cannot guarantee an effective infrastructure competition in the UMTS area. This comment was confirmed in a letter of 15 June. There it was added that “The creation of a new market for Mobile Multimedia is a very challenging task. If the market is a success, the operators might have to share the success with new types of competitors. If the market is a failure, no other party will be interested to share the losses. So it is counterproductive for the introduction of infrastructure competition to give parties which will not invest in infrastructure the right for special-but unspecified-access to the network infrastructure.” It was concluded that “there should be no general obligations concerning the introduction of new forms of competition on further steps of the value chain”.
- ETO agreed to make sure that the terms “service provider”, “reseller” and “operator” were used in a consistent and well defined way throughout the report. Written comments from another operator dated 22 June were in favour of licensing conditions for UMTS to be designed to promote facilities-based competition. It was added that “The economic facts of UMTS make it extremely unlikely that a carrier would foreclose any profitable distribution channel, including independent service providers. Requirements to favour such distribution channels are highly unnecessary. On the contrary, the uncertainty and added risk to mobile operators of such requirements would in fact deter investment in more

extensive network build-out, encourage companies to piggy-back on the investment of others, and reduce today's rapid growth in infrastructure."

- Another operator agreed that there was a risk, in the current proposal, of creating disincentives to investment in infrastructure, given the potential of an ONP-like framework involving open access and requirements to deal with service providers.
- In a written comment dated 18 June, an operator argued similarly that "the available frequency spectrum permits four operators to be licensed which means that the number of UMTS licences does not differ from the number of licences for second generation mobile communications systems". "Penetration rates and price levels in Scandinavian countries where no service providers are active show furthermore that the Service Provider Model has not contributed to the mobile communications market developing quickly in Scandinavia. (...) With only low investments and therefore minimal commercial risk, Independent Service Providers can profit from investments in the telecommunications infrastructure made by network operators. This results in considerable discrimination against network operators and prevents investment. The views mentioned in Recommendation 5 are combined with a similar risk and should be rechecked. Granting privileges to Independent Service Providers does not result in any advantage for the development of the UMTS market."
- An operator forwarded on 23 June by fax arguments completely in line with the previous two operators, adding that "The respective roles of UMTS players will only appear once the market has developed. It is highly difficult to assess the relative roles of these players (e.g. the role of independent international service providers), before UMTS is launched." It is concluded that "given the competitive nature of the mobile market, measures as subscribed above are highly unnecessary and risk to stop the growth in infrastructure".
- In a letter of 22 June, an operator suggested the following text: "ETO recommends that development of independent service provision should be encouraged. All suitable service providers, with their role and nature clearly defined, should be able to negotiate on a commercial and on a non-discriminatory basis access to networks and to the customer data base of public mobile operators."
- Yet another mobile operator mentioned experience with service providers and was of the opinion that they were of real importance for penetration of the market. It should not only be a matter of operators having obligations towards service providers, however, but there should also be some safeguards and protection for the operators.

ETO reminded participants of the initiative from the Commission a couple of years ago to develop a code of conduct for mobile service providers. At that time, however, the market had not considered this to be necessary.

- A mobile service provider of the new generation made it clear that there was no interest in access to commercial data on customers of mobile operators. What was of prime importance, on the other hand, was to obtain access to mobile networks and to be able to deal with them. Willingness to negotiate commercial terms and conditions was emphasised. Furthermore, it was mentioned that if service providers were excluded from providing fixed/mobile convergence services, this would mean a *de facto* monopoly for operators. Therefore, the recommendation to encourage access of service providers to mobile networks was supported.

3.2 Roaming and facility sharing

- A regulator hoped to discuss this issue extensively because a number of operators had already rolled out their networks and NRAs were trying to persuade new operators to spend large amounts of money in the interests of competition.
- An operator questioned the distinction between national and international roaming.
- Another operator saw national and international roaming as different things. International roaming involved an exchange of customers on an equal basis. National roaming by new operators would change the business case made before.
- ETNO was surprised to see a recommendation concerning national roaming because there seemed to be a confusion, at least in part, between roaming and interoperability. It could be agreed that interoperability should be ensured for the benefit of users. National roaming was a question of whether operators who had invested in infrastructure should make that infrastructure available for new operators who had not yet made any investments and for service providers without infrastructure at all. The question was not whether service providers should have the right to access a network but more a question of the conditions.
- In a written comment, dated 18 June, a mobile operator stated: “We do not see any advantages for National Roaming with simultaneous licensing of UMTS operators. Competition and the market mechanism are the best control instruments for the roll out of a telecommunications network. National Roaming leads to preventing investment, slows down new technical developments and endangers infrastructure competition. (...) National Roaming should be possible on a contractual basis between network operators.”
- In another written comment, dated 22 June, an operator wondered how “consumers will benefit by introducing new operators whose costs are higher, who will fragment the weaker market, and who cannot survive as an independent business”. One could be warned by the experiences in the US with bankruptcy filings and reorganisations of fifth wireless mobile telephony licences.
- A mobile operator explained that there was concern that NRAs would impose cost orientation for roaming. Experience in Italy showed that one could very quickly end in a situation of regulating the terms of national roaming.

ETO replied that it proposed that the only principles which should be applicable were transparency and cost orientation. If service providers did not obtain access to networks on these terms, NRAs could opt to enforce national roaming.

The operator concluded that as long as roaming was granted on commercial terms, an existing operator would not have any problem in allowing roaming. Competition law would be sufficient and no regulatory steps should be initiated to anticipate problems.

- In a written comment of 22 June, an operator expressed a similar opinion. National roaming between operators of GSM and UMTS systems could be considered on a temporary basis, after commercial negotiations, in order to facilitate network roll-out. Facility sharing should only be imposed for environmental reasons.
- An operator questioned the assumption that existing second generation operators would be at an advantage because of their ability to leverage their network antennas, transmitters and other facilities required to set up a new network, because it should also be recognised that UMTS will provide a competitive threat to the fixed broadband market. Many of these players would be bidding for UMTS licences, looking at them as relatively easy bridging to the broadband market because they would not have the requirement to dig up roads and lay fibre. Rather than focussing only on the competition between second and third

generation mobile systems, the competition coming from the fixed network, and the threat UMTS poses to the fixed network, should also be considered.

- The same operator pointed out that as soon as regulators were granted power to intercede within a six month threshold the risk arose of recreating the situation that is currently prevalent in the US concerning interconnection. Service providers required access to the local loop and there was little incentive for service providers to settle on a commercial rate as long as they had the potential to refer to a regulator who might impose a cost orientation principle.

A consultant wondered whether this observation meant that in the US regulators were being unfair to the incumbent operators.

ETO replied that service providers should pay the appropriate price and would probably be more interested in starting up as soon as possible rather than wasting time in resolving disputes.

- ETNO stated that in order for service providers without infrastructure to conclude a good deal with operators, there should be competing networks. It should therefore be made attractive to roll-out networks.
- Another operator saw a need to distinguish clearly between network operators and service providers. Where newcomers operating in the same conditions as the incumbent mobile operator were concerned, they would be committed to investing in network infrastructure. In this context national roaming had particular significance, aiming at facilitating the setting up of a customer database for the newcomer. In the context of service providers, roaming made no sense anymore because it merely transported facilities or network services to service providers.
- A consultant added that a fine distinction needed to be made between different kinds of service providers and newly licensed network providers, who, in order to penetrate the market for a certain time needed access to the infrastructure of their competitors. In the one case one could talk about access to networks and in the other case about national roaming. It could be argued that experience in Europe had shown that it was difficult to encourage a third or fourth licensee to build out another network in the face of existing networks and incumbents that have high market share and complete national coverage. National roaming as it had been encouraged in a number of European member states addressed the problem of coverage for the third or fourth licensee that had to roll out its network after others had already been established. This was a different problem from ensuring that service providers had access to the networks of mobile operators. If one in fact wanted to encourage infrastructure competition and encourage a competitive market at the network level, one had to take steps to compensate the licensees for the disadvantage they face when they rolled out their network in the face of entrenched operators.

ETO replied that in its proposals it had made this distinction clearly. Proposal 5 aims at encouraging independent service providers by ensuring them access to the network while proposal 10 had the main purpose of allowing new entrants on the UMTS market to comply with the obligations for roll-out.

- A regulator contributed as a factual statement that DCS-1800 operators in his country had been given the right to roam during the roll-out period of their network.
- An operator made the point that it was understood from the report that a clear distinction had to be made, not only between national and international roaming but also between roaming to and from second and third generation networks and between roaming to and from third generation networks. There was broad consensus that because of the different nature of UMTS, those involved wanted the multi media angle integrated. Because there

were spectrum resource problems due to the bandwidth required, it was vital that the third generation operators would be able to roam back to second generation in order to be able to carry voice and thus roll out a complete package of services.

In the context of service providers one of the differences which would also become apparent was that there would be a movement in the value chain from bits and bytes and length of call across to customer information and customer profiles. There was the possibility that the value would reside more with service providers. We would have to reconsider in depth the issue of whether obligations could be placed on network operators only in respect of their obligations to service providers and how to redress the absence of clear indication that service providers themselves have obligations, if not necessarily to network providers, then at least to consumers generally and the industry as a whole.

- Another operator pointed out in a fax of 23 June that facility sharing should be a matter for commercial and technical agreements. “National roaming should not be mandated but permitted, allowing each operator to decide whether or not to offer national roaming based upon customer demand and its own commercial position”.
- In a written comment, dated 15 June, an operator mentioned that the concept of facility sharing would have to be clarified. “One has to separate telecommunications infrastructure from other forms of infrastructure. The sharing of facilities (like sites and antenna structures) should be encouraged, because it might also help to overcome environmental concerns. The sharing of telecommunications infrastructure (radios, transmission, switching) will bring infrastructure competition onto question, because operators might give their build-up plans in rural areas”.

3.3 Duration of the licence

- The Commission questioned the recommendation to renew licences automatically unless there was a need for re-allocation of frequencies. The question was raised whether a new selection procedure should be started in order to ensure efficient use of frequencies. Assuming that the duration of licences (in some cases up to 25 years) was based on recovery of cost, there would seem to be no real need to renew those licences.

ETO replied that what needed to be considered was whether the frequencies were being used in an efficient way by the existing operator and not “can they be used in an efficient way by another operator”.

A regulator added that for environmental reasons it was not a good idea to reissue the licences. It was difficult to imagine a new operator building a whole new infrastructure.

- An operator agreed in written comments with the proposal but added that “it is unlikely whether there are any circumstances in which frequencies need to be re-allocated such that the best policy outcome is to require the withdrawal of resources from existing operators”. The following reasons were given: “First, it is not at all certain that full commercialisation of UMTS will require additional spectrum of that providing UMTS operators will access to spectrum will require withdrawal of that spectrum from existing second generation operators. Second, it is not likely that consumers will benefit from reduced capacity for 2nd generation services. (...) Moreover, the convergence process may very well involve equipping second generation networks with additional capacity so that they are able to handle larger volumes of traffic such as those carried by fixed networks.” It was concluded that “Accordingly, there is no basis to incorporate any mandatory spectrum refarming proposals into the licence conditions for third generation”.

ETO stresses that interpreting proposal 12 as a proposal for mandatory spectrum refarming is a complete misconception. ETO even proposes that on expiry of the initial period of validity, licences should be automatically renewed as long as frequencies are used

efficiently. Finally, this proposal is valid in a general way for all mobile systems. It is not specific for second or third generation mobile systems.

- One mobile operator mentioned in a fax of 23 June that the two years of notification of the withdrawal of the licences, in case of re-allocation of the frequencies, was far too short for the operators. “This period should be depending on economic conditions, i.e. for example be equal to the period of depreciation of the investments and or correspond to the periods typically planned in spectrum allocation decisions”.
- Another operator wrote on 22 June that the withdrawal of frequencies before the end of the period of validity of the licence would be unacceptable for second generation operators. ETO refers to its earlier comment where it is explained that the proposal aims at prolonging the duration of the licence, certainly not an early withdrawal of frequencies.

3.4 Interconnection

- An operator expressed concern about the recommendation to monitor the termination cost on a mobile network because it preempted the outcome of an ongoing DG IV inquiry. There were a number of reasons why fixed-to-mobile retail prices were higher than mobile-to-fixed retail prices. This issue involved more than questions of interconnection. This was also a marketing issue and integral to the whole “called-party-pays-system” associated with GSM.
- An operator stated in a written comment that “there is no clear basis, under competition law or policy (...) for Member States to impose a general obligation for mobile operators, including UMTS operators, to provide cost information to regulators in order to develop cost-oriented rates or ensure that fixed-to-mobile rates are cost-oriented.”.
- Another operator supported the previous speaker and wanted to see “prices for a fixed-to-mobile termination” rather than “cost”. It was not only a matter of retail price but also a matter of the changing role of interconnection in the business of an operator. Since the number of operators was increasing, revenues from interconnection were likely to be much higher in absolute terms with respect to the bills or revenues coming directly from the operator’s own customers even in a short term perspective. Interconnection was not just a matter of cost but was in itself a matter of marketing.
- A third operator had no problem agreeing that this aspect should be mentioned in the report but found cause for concern in the reference to it in the recommendation.

3.5 Further study on licensing of wireless local loop and fixed/mobile convergence

- One operator stated in a written comment of 15 June that “even without specific regulation convergence is already happening” and that “it is not necessary to clarify the licensing of DECT and WLL because the core bands, which are under discussion now, are primarily dedicated for mobile communications”.

ETO is aware of the fact that converged services are emerging. It is, however, our strong opinion that the divergence in licensing conditions for fixed and mobile services and networks carries the risk of delay in market access and the potential for distortion of competition. Therefore, the proposals were maintained unchanged.

- Another operator agreed in a letter of 22 June that clarification of the licensing regimes and regulatory certainty for the services mentioned was very important. It was, however, not clear why “the licensing conditions for third generation needs to be the vehicle to resolve these issues.” Furthermore, the operator recommended consideration of a report of

the UMTS Forum concerning “Considerations of Licensing Conditions for UMTS Network Operations”.

- In a written comment received on 23 June, a third operator agreed that regulatory certainty was necessary to promote investment in the infrastructure that would support convergence. While the recommendations for further study of regulation of WLL was supported, it was mentioned that “clarification of the licensing regimes for converged services can proceed separately from the licensing conditions for third generation spectrum”. The operator expressed the further opinion that he “does not think that any further regulation is needed on top of the general competition law.”

It should be borne in mind that the aim of the ETO study is to propose harmonisation of licensing conditions which are useful for future mobile operators. The UMTS Forum report, which one of the operators encouraged ETO to take into account, also considers clarification of wireless local loop and converged services important issues for the future of mobile operators.

- One operator took the opportunity to point out in his written contribution that, although it was natural to consider how to adapt regulation processes in order to be prepared for UMTS, it would be premature to change the existing rules in the fixed and mobile sector. Changing the regulatory approach for mobile communications, which was based on market forces, could have a negative influence on the development of second generation mobile systems and consequently on a successful start for UMTS.

4. Need for harmonisation and a priori regulation on the European level

- The Commission pointed out that the workshop was an occasion to give opinions concerning the extent to which operators and industry wanted to see the issues discussed tackled at European level.
- Another representative of the Commission saw the report as an exercise to check whether there was a need for harmonisation of the conditions listed in annex to the licensing directive. This was not going beyond the licensing directive, but was a matter of putting flesh around the general principles.

ETO explained that one aspect of the study which had particular value was the detailed examination of how the conditions mentioned in the licensing directive are reflected in the rights and obligations imposed on operators in the national legislation of different countries. Furthermore, work had been carried out to check if all national licensing conditions imposed on mobile operators belonged to the categories listed in the licensing directive. This was thought worth examining because the mobile sector had been liberalised before the licensing directive was adopted.

Harmonisation consisted in distinguishing clearly between qualification conditions, primary and secondary selection criteria and operating conditions.

5. Conclusions of the workshop and impact on the proposed recommendations

- The Commission found the discussion interesting. Reference was made to the proposal for a decision on the coordinated introduction of UMTS in the Community, which was at the time in co-decision procedure and was hoped to enter into force by the end of the year. The decision would provide for the possibility of enforcing certain rules at European level. The details of such rules would have to be worked out by CEPT. However, whereas ECTRA and ERC decisions were not mandatory for member states, the EC decision provided for a methodology to enforce some measures so that a predictable regulatory regime could be put in place. In this context, the workshop could be seen as a first input for the regulatory regime which had to be in place by the year 2000.
- In chapter 5 of the report describing the specificities of UMTS, more explicit reference should be made to the satellite component and broadband services. Concerning the satellite component, the results of the ETO report on satellite networks would be taken into account.
- There was general support for the 4 proposals concerning harmonised licensing procedures (qualification criteria, selection criteria and transparency of the procedure). Questions were raised, however, as to whether in a competitive environment tariffs should be part of the selection criteria. ETO stated its opinion that the selected operator should be outstanding in ensuring the interests of the consumer and “tariffs” were an important element. Finally ETO agreed to take into account the suggestion of changing the name of the proposed selection criterion called “range of services” to “innovative services”.
- Concern was expressed by several existing operators about ensuring that service providers would have non-discriminatory access to the network and database of existing operators.

Concerning access to the database, ETO agreed that it should be made explicit that this meant access to directory information and not to sensitive commercial information concerning customers.

- Concerning access to the network, several operators cautioned that this might discourage investment in the network. While one operator doubted the positive effects of service provision in general there were others who saw it as important for the development of UMTS. A service provider of the new generation made clear that access to mobile networks and the possibility of dealing with operators was of prime importance. It was observed by another operator that this could be solved through standardisation.

Terminology used in the report will be checked in order to avoid confusion between “reseller”, “service provider” and “content provider”.

As this issue seemed to need further reflection, ETO proposed to conduct an in-depth study of the subject, analysing the needs of different kinds of service providers and the impact of open access on the competitiveness of operators.

- There was general consensus that national and international roaming were different subjects and that concerning international roaming no further regulatory action was desirable. This distinction, which appeared to be important from the operators point of view, would be strongly underlined in the report.

It was recognised by several operators that there might be a case for national roaming between second and third generation systems in order to allow complete newcomers to roll-out the network. Roaming with service providers on the other hand was controversial and again felt to be a disincentive to investment in infrastructure.

- It was agreed that the explanation preceding ETO proposal 10 would be modified to reflect this discussion. The text of the proposal itself did not refer explicitly to national roaming for service providers and therefore needed no modification.
- There was further comment on the last part of the recommendation, on the proposal to give NRAs the authority to resolve disputes on national roaming within six months on request by either party and to observe whether the principle of non-discrimination had been respected. It was argued that a similar provision in the US had led to a situation where there was little incentive for service providers to settle on a commercial rate as long as they had the potential to refer to a regulator who could impose a cost orientation principle. ETO restated its belief, however that it is in the interests of both parties to reach an agreement on contractual terms. The possibility of intervention by the NRA is thought useful to discourage both abuse of dominant position and refusal to settle at a commercial rate.
- From the discussion on the duration of the licence, it was concluded that if existing operators used the spectrum efficiently according to the terms of their licence, the licence could be renewed until frequencies needed to be re-allocated. Environmental considerations added support to this recommendation.
- The suggestion to avoid preempting an ongoing discussion within DG IV concerning the price for terminating calls on mobile networks would be taken into account. The question of monitoring this would be deleted from the text of the recommendation but would still appear in the conclusions of the study as an issue for possible follow-up in the future.

Annex 12 Comments expressed by Portugal.

In a fax dated 1 June, Portugal expressed the following reservations on the proposals contained in the report.

- **Harmonisation of mobile operators qualification and selection criteria**

“We are not convinced of the need for such harmonisation as different conditions exist in national markets. Furthermore it has not been developed in previous systems (GSM and DCS-1800) and the new UMTS EU Council decision does not foresee it. The Licences Directive provides the appropriate legal framework and prevents the imposition of any abusive conditions.”

- **Independent service providers**

“Concerning independent service providers we reaffirm our position that they should not be imposed to the network operator but just be a commercial option for them. Contrary to what is stated before Recommendation 5, in Portugal their non-existence has not driven to any lack of or reduced competition - our market is one of the most competitive in Europe and the country has one of the highest penetration levels due to a fierce competition between the operators.

- **Access of GSM operators to DCS-1800**

*“The references to DCS-1800 licensing procedures are not complete. The main objective should be to ensure the **same** conditions for all the mobile operators in terms of frequencies in Portugal the two first operators and the third one (licence granted in 1997) have the same number of channels either in the 900 or the 1800 MHz frequency band.*

- **Roaming and facility sharing**

“We strongly fear that national roaming can promote a division of the market between different operators, with a negative result in what concerns effective competition in the sector. It may furthermore hinder the development of the networks by the new entrants and undermine the obligations imposed on them about national coverage.”

“The issue of facility sharing may be over estimated and need further considerations, as it may also create an excessive dependence on the incumbents infrastructure. However where restrictions exist, for instance for environmental requirements, the access to existing infrastructure should be allowed in non-discriminatory conditions.”

Annex 13 Comments expressed by Germany.

In a letter dated 31 July, Germany expressed the following comments.

“We basically agree to the Draft Final Report on Licensing Conditions for Mobile Communications (WO 48 262) as presented during the XXVIth ECTRA Plenary. The proposals/recommendations included in the report are an important contribution to the discussion on UMTS licensing. We would not want it to result in any binding regulations, however, requiring licensing conditions to be harmonised further than under current EU regulations. Licensing conditions should be stipulated at national level by the competent regulatory authorities, on the basis of the relevant EU directives and the national telecommunications laws. From our current point of view, we could not approve of any wider harmonisation of licensing conditions.”